

SCHOOL OF ORIENTAL AND AFRICAN STUDIES, UNIVERSITY OF LONDON

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# Temporal Reference in Lakandon Maya: Speaker- and Event-perspectives

A thesis for the degree of Doctor in Philosophy in Field Linguistics

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## ABSTRACT

The investigation analyses the grammatical and semantic properties of a number of commonly occurring time words in Lakandon Maya, the least described of the four existing Yucatekan languages spoken in southern Mexico and in parts of Guatemala and Belize. Lakandon Maya has around 800 speakers who live in one of two settlements in the southeastern lowlands of Chiapas, Mexico. The language materials that the analysis rests on were collected by the author in the field as part of a documentation effort supported and funded by the Endangered Languages Documentation Programme (ELDP) at SOAS, University of London.

In Lakandon Maya, deictic time words such as *7uhch* ('before', 'long ago') and *ka7chik* ('before', 'previously') have pragmatically dependent features of meaning that relate to the indexical ground rather than the before-after relations relevant to time reference proper. The salient meaning in the two forms can best be described in terms of *knowledge asymmetries* between the speech participants. However, such modal-like semantics do not exclude the forms from being considered as operators of time reference since they are only used in specific temporal contexts.

The results of the investigation point to a shift in meaning in the forms that cannot be anticipated from the available literature on other Yucatekan languages. There, cognates of the investigated forms have been described solely as temporal operators with simultaneous, anterior, and posterior meaning.

The investigation argues for a separation between time words that uses the speech situation as the sole point of reference and time words that denote a relation between two events. This separation is defined in terms of *speaker-dependent* and *event-dependent* time reference. These concepts are analogous to absolute- and relative time reference but should be considered as separate due to the pragmatic motivations that underlie the function and use of the forms.

## Acknowledgements

I regret to say that I remember too little from my introductory courses in linguistics at Stockholm University where my academic journey began almost a decade ago. One thing I do recall is head of department Östen Dahl saying that every linguist should spend a year doing fieldwork on an under-documented language due to the strong likelihood that most of the world's spoken languages will disappear within one or two generations. The disappearance of a language of course has (negative) consequences for the identity and culture of the former speakers and their descendants – which is the most important reason for working with speakers of endangered languages in efforts of revitalisation and documentation – but it also means that linguists have one less object of study. As the present work shows, I took his suggestion to heart.

At the outset, I naively thought that linguists studied languages – in the field or in the University – in order to be able to speak them. I imagined myself learning to speak an almost forgotten Indian language that would reveal some secret knowledge that only the speakers of that language possessed. Surprisingly, such a romantic scenario was not too far off. Working with speakers of a(ny) language exposes the linguist to aspects of socio-cultural structures and conventions that sometimes are encoded in the language, and which always pose a challenge for the linguist to describe and understand. On the other hand, linguistic fieldwork also reveals how similar linguistic and conceptual structures can be between cultures that in geographic and historical terms are worlds apart.

After receiving my BA in linguistics and computational linguistics from Stockholm University, I went to the University of Copenhagen to study Classical Nahuatl, which although it was centred on the study of 16<sup>th</sup> Century texts and thus was more philological than mainstream linguistic in orientation, taught me a great deal about language and linguistic inquiry. This was mainly due to the guidance and linguistic expertise of Una Canger who taught all classes on Classical Nahuatl and Meso-American languages. Una made the prospect of doing fieldwork on a Native American language spoken in Mexico or Guatemala seem like a reality to me and she also introduced me to Terry Kaufman who directed a documentation project called the “Project for the Documentation of the Languages of Meso-America” (PDLMA) out of Mexico together with John Justeson and Roberto Zavala, and who was looking for linguists to participate in the project.

Being on Terry's documentation project meant a rude awakening in many ways. I realised how little I really knew and how much there was to do with regard to describing languages, regardless if they were endangered or not. The focus and fierceness of Terry's efforts in gathering lexical material for dictionaries and the amount of knowledge he has both with respect to minute detail and the larger view of how languages are related struck me like punch to the gut. I struggled to keep my nose above water for my first summer on the project but I also realised that fieldwork was something I wanted to do and that I *could* do.

Directly following my first summer on the PDLMA project, I started as a PhD student in London on the Endangered Languages Academic Programme. There, Peter Austin and the lecturers on the program, Eva Schultze-Berndt and Friederike Lüpke, showed me other aspects of linguistic fieldwork, ones that emphasised methodological



and ethical issues in addition to collecting words for dictionaries. There was of course attention paid to linguistic analysis and collecting and treating language materials, but the orientation of the program featured a focus on how fieldwork on especially endangered languages should be conducted.

In the field, after my preparatory year in London, Roberto Zavala acted as my supervisor away from London. Roberto directs the linguistic program at CIESAS Sur-Este in San Cristóbal de las Casas, which is the closest major town in the area where I went to do fieldwork. Roberto has a beautiful house on the outskirts of San Cristóbal and it is usually home to one or several linguists who are there either as visiting lecturers holding classes at CIESAS, or like me, spending a few days away from the field, enjoying Roberto's hospitality and vegetarian cuisine.

At the end of my field trips I returned to London to process and analyse the collected language materials. There, I had the opportunity to assist in teaching classes and marking assignments for Peter and Friederike. Through all my travels I have also regularly returned to Stockholm and Sweden since my wife and family live and work there. It is also there that I completed the writing of the present thesis.

I wish to extend my sincere gratitude to all friends and colleagues. Una made all that followed possible by her faith in my abilities despite the lack of much evidence to support such faith. I have the deepest regard for her as a linguist and as a person. She has indeed set a standard for my own work and conduct, both past and future.

Terry is both terrifying and inspiring and he has been a decisive influence on my work on Lakandon Maya. His ruthless and demanding style of doing fieldwork has shaped my work ethics and reminded me of the importance of attention to detail, something that I had forgotten. Terry's knowledge of Mayan languages is a treasure house that I have been fortunate enough to visit, but not without paying my way, of course.

Roberto gave me the benefit of a doubt and supported me in many ways, not only by providing me with a haven while in the field, but also by sharing his knowledge and experience. I am also indebted to Roberto for guiding me in matters of applications for fieldwork funding. Roberto's family recipe bread-cake-dessert served after one dinner at Roberto's house is a reason all on its own for expressing gratitude.

Peter deserves my deepest thanks for his guidance and intellectual support in matters of fieldwork, writing and participation in academic life at SOAS, London. He sets an example with his extensive knowledge, keen intellect and unwavering interest in the efforts of his students. Peter has allowed me a lot of room to manoeuvre both with regard to the topic of my thesis and the way I wanted to conduct my research. I also thank him for all the lunches and coffees that he generously treated me to along the way.

I thank all my fellow students and teachers that I have had the opportunity to interact with and learn from; Serge, Friederike, Eva, Birgit, Leora, Lutz, Mary, Sophie, Stuart, Anna, Uranchimeg, and everyone on the 2003-2004 masters program. I especially wish to thank Pete Budd for his friendship and generosity. I hope to be able to repay at least some of all the favours he has extended me over the years.

Thanks also to David Nathan, Rob Munro, Rob Kennedy, Tom Castle, and Bernard Howard for help and assistance on issues related to archiving and the technical aspects of documentation. I also extend my sincere thanks to Zara Pybus for helping me

sorting out all kinds of practical matters during her time as the administrator of the ELAP. Alison Kelly has stepped in after Zara left and I thank her for the same reasons.

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Without stating their names, I thank all the speakers that patiently and graciously have shared their words, stories, songs, and thoughts that now constitute the foundation and backbone of the present work. My deepest admiration and respect for their generosity and kindness towards a man who must have looked like a tourist but who seemed to have missed the last bus home and lingered for an unusual amount of time.

Words fail me in expressing the gratitude I feel towards my wife and best friend, Lotta, who patiently and trustingly waited for me to return from Mexico and London over the past four years. Her support made all my efforts possible and I will never be able to repay her in full for her faith in me, her generosity, tolerance, and love. I dedicate this thesis to her and to our baby girl, Klara, who at the time of writing is only 1 month away from joining us. Thank you.

Stockholm, September 2007

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# **List of abbreviations and conventions used in glossing:**

1: first person	IAN: inanimate
2: second person	IMM: immediate past AM-marker
3: third person	IMP: imperative suffix
A: ergative person prefix	INC: incomplete aspect
ADR: addressee	INCL: inclusive
ADV: adverbial	IND: independent pronoun form
AF: agent focus suffix	IV: intransitive
AGNT: agent prefix (nominaliser)	LOC: locative
AN: animate	M: mother
ANA: anaphoric	MAN: manner
APASS: anti passive	MPASS: medio passive
AP: anti passive suffix	NCL: numeral classifier
AGPASS: agentless passive	ND: nominal deictic base
ASSUM: assumptive	NEG1: generic negative
ASSUR: assurative aspect	NEG2: negative with restricted scope
AUD: auditive/sensory	NEG.EXIST: negative existential
B: absolutive suffix	NOM: nominal suffix
Br: brother	NOMSR: nominaliser
CAUS: causative suffix	o: older
CEL: celeritive	OBL: obligatory aspect
CELPASS: celeritive passive	OBLQ: oblique
CL: noun classifier	OST: ostensive deictic base
COM: completive aspect	PARTC1: participle (-a7n)
CONT: continuous	PARTC2: participle (-b'ir)
CONV: conversive	PL: plural
CPASS: canonical passive	PLN: transitive plain status
CP: transitive completive status	PLN.IV: intransitive plain status
CP.IV: intransitive completive status	PN: personal name
CPL: completed	POS: positional
D: daughter	POSS: possessive suffix
DEF: definite	PREP: generic preposition
DEP: transitive dependent status	PROX: proximate
DEP.IV: intransitive dependent status	R: regional
DER: derived (root)	REC: recent past AM-marker
DET: determiner	REDUP: reduplicative
DIST: distal	REF: referential
DTR: distributive suffix (archaic)	REM: remote past AM-marker
DUB: dubitative clitic	RSLT: resultative
E.DEP: event dependent	REPORT: hearsay (evidential)
ENC: enclitic	S: son
EXCL: exclusive	SC: sociocentric
EXIST: existential	SCOPE: propositional scope
F: father	SEQ: sequential
FOC: focus	SG: singular
FUT1: (indefinite) future AM-marker	SP: spatial deictic base
FUT2: (definite) future AM-marker	SPKR: speaker
H: husband	SS: sound symbolism/sound symbolic
IA: inalienable	root



SUB: subordinate  
TD: terminal deictic  
TERM: terminative aspect  
TN: toponym  
TOP: topic  
TR: transitiviser suffix

W: wife  
WH: indefinite pronoun  
y: younger  
Z: sister

### **Glossing conventions:**

The hyphen (-) marks morpheme boundaries; the equal sign (=) marks compounding and reduplication; and the stop (.) is used with multiple word names (e.g. *san.cristoobal*). Brackets ([ ]) are used for transcribed parts of utterances that are either false starts, wrong sayings, or outside of the rest of the utterance, as indicated by the speaker that assisted in transcribing and translate a specific passage of speech. It can also mark an extracted passage of speech ([...]).

# 1. Introduction

The topic of this investigation came out of a preoccupation with thinking about what *time*<sup>1</sup> is, what it means, and how it is talked about. *Time*, of course, has many meanings and defies any attempt at a concise definition. Some definitions of *time* have also spread from one field of investigation to another resulting in a cross-contamination of time concepts that can be difficult to tease apart (cf. section 3.1.1.2). Although it would be reasonable to think that a discipline like linguistics would import, at least partially, a definition of the time concept from psychology – given the connection between language and cognition – this appears not to be the case. Instead, linguistics has adopted its temporal definitions from philosophy<sup>2</sup>. The same conceptual devices and theories that are used to explain and analyse *time* in philosophy are brought over into linguistics with only slight modifications. This is not surprising since language traditionally, and from a structuralist perspective, is viewed as a *system* of communication. In line with the logico-deductive research tradition of philosophy, most linguists have tried to describe the complex practice that we call language in the form of a system governed by laws and structural constraints. This is a good strategy for some aspects of linguistic analysis, but a worse one for others. The communication part of the system is put aside in favour of the complex splendour of the system itself. The act of communication is often regarded as interference, filled with irregularities and errors that blur the true, underlying structure of the language (e.g. Chomsky 1968). Such a view has many advantages. It is neat and tidy, and it facilitates description. Communication and language-in-use, on the other hand, is messy and many times defies easy description. It is, however, not so much the view of language as a system that is problematic, but rather what one includes as part of such a view. There is of course consistency to many “irregularities” as well as predictability in communicative practices. It is just more work. It means devoting an equal amount of time between the collection and treatment of language materials, and the theoretical issues that one wants to formulate and investigate using those materials.

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<sup>1</sup> A separation is made between the general concept of *time*, which is italicised and more specific uses of the word as it appears in expressions such as ‘time in language’, where the word will be unmodified.

<sup>2</sup> The influence that philosophy has had on linguistics as a discipline is substantial given that many central concerns, especially ones relating to semantics and pragmatics were investigated first by philosophers (e.g. Wittgenstein 1953; Grice 1957; Austin 1962). This is to be expected since language is important to many of the problems that philosophy is concerned with, i.e. meaning and reality. The semantics of *time* is no exception.

The prerequisites for the present investigation include a view of language as a means of communication, first and foremost. Communication can only occur between two or more persons, which makes language use primarily a social act. Any social act (especially acts of communication) depends on agreements between actors so that there exists a common ground against which the same acts can be interpreted and understood. The agreements between actors are culturally conditioned and derive their meaning from the same cultural background that constitutes their common ground, and that furthermore provide the imperative for their actions in the first place. The cultural frames we all live our lives in are in part constructed from the way we talk about the world and the meaning we impose on our statements because it constitutes that same world.

Following the premise that language and culture are inseparable, it is necessary to give an account of the culturally conditioned context of the speech situation in order to understand the semantics of a concept such as *time*, that is rooted in the reality from which the speech situation springs. As argued by Givón (1982) among others, communication systems are pragmatically motivated and arise from pragmatic imperatives. This makes a context sensitive, empirically based method of investigation the best candidate for understanding any aspect of such systems.

### **1.1 The topic of investigation**

What follows is a detailed account of the function and meaning of a number of time words in the Yukatekan language, Lakandon Maya, that are important parts of a puzzle that pictures time reference from the point of view of the speaker. My goal with this investigation is to let language-specific meaning structures emerge from observing the use of these time words as they can be related to the speech participants and their individual, temporalised beliefs. However, at the same time I wish to ground the description both with regard to previously made investigations of deixis, and to time reference by means of the category *tense*, and by other cross-categorical ways of expressing event order.

I have spent a year in Mexico working with speakers of Lakandon Maya, recording, listening to, and analysing their histories, stories, conversations, and songs. Using these collected language materials, I have attempted to make sense out of the way speakers use time words in acts of reference to events, personal or otherwise, and I have

gained an insight into the grammatical requirements for the use of some of these time words while at the same time learning the grammar of the language.

### **1.1.1 The field site**

The place where I went to do linguistic research on Lakandon Maya is located in the southeastern corner of Chiapas, which is the southernmost state in Mexico. Chiapas ranks as the poorest state in Mexico, a fact that coincides with it being inhabited by the highest number of indigenous people in all of Mexico.

The community of Lacanjá Chan Sayab is located near the ruins of Bonampak, some two and a half hours by mini-bus from Palenque, which is the nearest, larger town. Lacanjá is located within the “Selva Lacandona” reserve, some 600.000 hectares of rain forest that was given to the Lakandon community by the Mexican government in 1972 to prevent it from complete deforestation (see Trench 2002 for details).

The current number of Lakandones in Lacanjá is around 600 (ibid: 103). They are slash-and-burn farmers that traditionally have relied on hunting in addition to their agrarian activities. Their lifestyle and living conditions are changing rapidly, however, a situation, which is resulting in an increasing pressure on speakers to shift from using Lakandon Maya towards using Spanish. An introduction to the Lakandones from a historical and cultural perspective is found in chapter 2.

### **1.1.2 The time-line, context, and pragmatics**

For this specific investigation, the quasi-scientific, *time-line approach* that has dominated linguistic investigations on time in language (cf. Comrie 1985; Klein 1994; Haspelmath 1997; see section 3.1 for further discussion), has been abandoned to make room for other properties of temporality that are contained within the meaning of time words and that constitute the motivations for their use.

When people make reference to a temporally situated event or state they do so with more in mind than an imaginary time-line, or a before-and-after relationship between events. This should be expected since the communicatory function of language always is the primary one. According to Givón (1982), this is why logic will always come up short in explaining core properties of language; logic fails to take into account the addressee and speech participants aside from the speaker. The intentions of the speaker can never be separated from the effect that they are supposed to have on an intended addressee.

When the context, the speech participants, and their combined beliefs are taken into account, the time-line loses some of its explanatory power. What we are left with is reference to a world in flux that is made sense of by the communication of concepts and ideas that the speech participants share by being users of the same language, and by experience. This also means that the investigation cannot be satisfied with information gained from questionnaires or judgement-tests because of its stated objectives and mode of research.

The present investigation adopts a view of pragmatics from Levinson (1983), namely that, “pragmatics is the study of those relations between language and context that are grammaticalised or encoded in the structure of a language (includes the study of deixis)” (ibid: 9). Such a definition makes the boundary between semantics and pragmatics gradual and less fixed when compared to other fields of research such as e.g. phonology and syntax. The crucial component in this regard is, of course, *context*. A well studied category like tense, which is deictic in nature, and thus relevant to pragmatic considerations, can also be investigated from a pragmatic perspective (i.e. with a starting point in the context of utterance) even though it is possible to ignore contextual factors and instead focus on the (intra-)systematic functions and semantics of the category.

Pragmatics is by definition occupied with making sense of open-ended, non-discrete, and context-dependent meaning. There are thus not always bi-polar answers available for questions that are posed from a pragmatic perspective. This might lead one to think that pragmatics stands for an “anything goes”-approach, and that scientific claims are impossible if they are to be gained by pragmatic methods and means. On the contrary, the questions and potential answers that can be achieved by staying with authentic (i.e. non-introspective) speech examples and empirical data, and interpreting that data from its own properties, has several advantages and it is, in my mind, the best way to approach the larger question regarding what language is all about.

### **1.1.3 The perspective of the speech participants**

This investigation will show that for speakers of Lakandon Maya, “the past” is not primarily defined with regard to temporal distance or an event order relation with respect to the moment of utterance. It is more concerned with *knowledge asymmetries* between the speech participants and the claim of *personal knowledge* by the speaker.

What separates the past from the future is *knowledge* as opposed to *expectation*. In Lakandon, the speaker can make assumptions regarding the already acquired knowledge of another person (i.e. the addressee) on whatever grounds, whereas he cannot do the same with expectations. The primary semantics in making reference to a future event is whether the speaker's agency and intentions are part of such an event or not. This contrast also brings the addressee into focus since the communication of the speaker's intention or ability is completely dependent on its relevance to the addressee, but not on his/her beliefs.

When the beliefs of the speech participants are not at stake, events and states are related to other events. Expressions containing semantic features that connect two events to each other may still have a deictic function, of course, as long as one of the events is grounded in the moment of utterance. The results of this investigation clearly show that some eventualities<sup>3</sup> are deemed important to relate to some other eventuality either because they are *the cause of*, or *a part of* it.

What emerges from the present investigation is a picture of *communicated time* that makes visible the important parameters of meaning that are connected to observing authentic speech-acts and situating speech participants with regard to events and states that are important enough to have been remembered, or relevant to expectation.

The present investigation will attempt no solution to the problem *time* poses in a phenomenological sense. However, in order to explain expressions of time reference in language, phenomenological aspects of *time* will be included in the discussion. I will need to consider how some psychological and cognitive aspects of *time* can be formulated in way that ordinarily is excluded from investigations of time in language.

A linguistic investigation of *time* is, as suggested above, not about "real" or "physical" time, but about the way people talk about *time*. The present investigation will thus be concerned with the meaning and use of words and phrases that relate to the phenomenon commonly known as *time*. Whereas the general phenomenon of *time* has been investigated in many different disciplines and from various standpoints, linguistic time is only concerned with how it is encoded in language. Even with this limitation to the object of study, there are many things to consider if a full picture of time in language is to emerge.

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<sup>3</sup> The term 'eventualities' is used to cover both events and states, and all other subdivisions of the two concepts.

Another restriction is also imposed to the present study. Depending on methodology, observing language use can provide clues to questions about human cognition. However, this investigation will be confined to viewing the structure of categories and the semantics relating to time reference, as a culturally mediated way of organising reality without imposing any cognitive claims to its results. Predictions for human cognitive capabilities and dispositions regarding time require other research methods than the ones employed here.

#### **1.1.4 Time and deixis**

The status of deictic expressions in language is according to William Hanks, a central construct; “as a conventional verbal resource, deixis is not an isolated peculiarity in the organisation of language in culture but rather *a core construct*, as basic even as body space, domestic space and other lived spaces in which social reality is produced and reproduced” (Hanks 1990: 28 [my italics]). This is equally true for the grammatical encoding of deictic time in language. Some languages lack tense (among them Lakandon and Yukatek Maya), but no language lacks *deictic time words* or *adverbs* expressing temporal relations (Klein 1994: 2). This fact constitutes a strong argument for investigating deictic time words and not just tense markers.

The study of linguistic reference must take into account a fair amount of extra-linguistic information in order to arrive at a clear understanding of the semantics of expressions of reference, how speakers orient themselves and others with regard to some object or other person, and how they express such orientations in everyday language use. William Hanks (1990) again supplies a definition to this approach: “the objective is to motivate the linguistic categories by grounding them in the socio-cultural system in which the body and spatial world are constituted” (ibid: 27). For a researcher this means an immersion in the everyday life practices (focusing on speech practices) of the speakers, using an approach similar to the participant observation techniques of anthropologists.

While drawing on Hanks’ work on Yukatek deixis, the focus of the present investigation will, as stated, be on temporal deictics. The systematic use of deictic expressions and their link to the specific organisation of Yukatek Maya everyday life is clearly demonstrated in Hanks’ study with regard to other, non-temporal dimensions of

deixis, and thereby constitutes a platform for my own investigation of the use of time deictic expressions in the closely related language Lakandon Maya<sup>4</sup>.

## 1.2 Preview of the results

I do not include a section in this introduction discussing what sometimes is called “the problem” of the investigation. I think using such terminology leads to the wrong kind of expectations in the present context with regard to the shape and form of this specific investigation. Although the results presented here are noteworthy for both methodological and theoretical reasons, and for motivating further research in several areas relating to the present topic, I do not see it as solving a problem as such. I did not set out with the aim to prove or refute any specific previous hypothesis. Instead, I wished to provide a fair picture of how time reference is made with regard to talked-about events and what the important semantics are in expressions used in making reference to them.

I did aim for the description to be fine-grained by choosing to disregard as little information as possible *ad hoc*, before I understood what function it had in providing impetus for the use of a certain expression. I think it is a mistake to regard time reference, by whatever means, as something that can be isolated from other conceptually distinct categories such as *aspect* and *modality*. I am not alone in this view but it has rather been observed over and over that *tense* is closely connected to both of the aforementioned concepts depending on what kind of tense marker is under discussion (cf. Dahl 1985; Enç 1996).

This inseparability has special relevance for the present investigation since the categorical inflection of tense is absent in Lakandon Maya, as it is in Yukatek Maya (see Bohnemeyer 1998). By testing the functions and semantics of the expressions under investigation, borrowing some of the strategies used in investigations of tense, it appears that cognates of several expressions that have been previously described in Yukatek and Itzaj Maya as proper time words, have no function in grounding events in time in Lakandon. From a pragmatic point of view, the same expressions have a clear function in making reference to “past” events, but they do so in ways that take into account modality-like parameters of meaning (but see section 3.4) that relate to *speaker commitment* and *knowledge asymmetry* between the speech participants.

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<sup>4</sup> For a classification of the Mayan languages, see section 2.1.1



### 1.2.1 *7uhch* and *ka7chik*

Two expressions clearly express this semantic contrast, namely, *7uhch* and *ka7ch(ik)*<sup>5</sup>, both of which are sometimes translated as ‘antes’ in Spanish (Eng. ‘before’). They are used adverbially to mark past events but are optional in the sense that past events are often referred to using neither of the markers. They modify any predicate but have an uneven distribution in analysed texts with frequent use in personal narratives and almost complete absence in traditional stories and hearsay accounts. In fact, the distribution of *7uhch* is sometimes in a complementary distribution with *b’in*, which is the hearsay marker. There is, however, no indication that *7uhch* should function as an evidential marker (cf. Aikhenvald 2004) since it frequently marks information that the speaker had no sensory access to, and since it does not make reference to a source of information.

*ka7ch(ik)*, on the other hand, has a much scarcer distribution than *7uhch* and it appears that the conditions for its use are more constrained and specialised than those of its counterpart. There are definite patterns to the use of *ka7ch(ik)* and although it is translated in terms of the same corresponding Spanish time word (‘antes’), it fails to ground the event that it attaches to in time.

Two examples illustrate the semantic contrast present in the two expressions. In the first example, a Lakandon speaker, EChK<sup>6</sup>, explains to a visitor what he has (not) said during a meeting. In using *7uhch*, he states his personal memory of what he did *not* say, which is in contradiction to what the addressee remembers:

(1.1)<sup>7</sup> *ma7 7inw-a7r-aj-Ø raji7 [ka7] yäx juhntaj 7uhch*  
 NEG1 1SG.A-say-CP-3SG.B 3SG.IND [SUB] first meeting(Sp.) before.EXCL  
 ‘I didn’t say that at the last meeting.’  
 [HB041023\_1EChK\_7]<sup>8</sup>

<sup>5</sup> There is a dialect division into Northern- (NL) and Southern Lakandon (SL) that is visible in this semantic set where the Northern dialect has *7uhch* and *ka7ch(ik)* and the Southern dialect has *7uhch* and *kuhch*. The semantic contrast is, however, identical in both dialects (see section 5.3).

<sup>6</sup> All speakers that have contributed to the materials that the present investigation is based on have abbreviated names to veil their identity. A presentation of some of these contributors is found in chapter 2.

<sup>7</sup> The transcription of Lakandon Maya speech is phonemic and uses an orthography that closely resembles the Official Mayan Orthography used in Guatemala with the notable exceptions, /ʔ/ representing the glottal stop and /h/ the high tone. More information on the phonology and the orthography is provided in section 2.4, below. The glossing convention uses three tiers: the first is in Lakandon Maya (italicised), the second consists of glossing abbreviations that are listed directly following the index (p.10), and the third features a translation into English using single quotes. Directly below each example, a file name is given in square brackets that refers to a specific processed recording that is contained within the larger documentation materials.

<sup>8</sup> The examples of transcribed, analysed Lakandon speech in the thesis are from both the northern- and the southern dialect. Instead of marking each example with an NL or SL to state which of the dialects is

In the second example, a contrasting perspective is adopted in an explanatory narrative/conversation where EChK (E) this time is telling me what he knows about the Lakandonese' interpretations of dreams. He asks his son (KY) to help him by repeating something he mentioned only a short while before:

(1.2) E: *b'ay t-aw-a7r-aj-Ø* *ka7chik*  
 what COM-2SG.A-say-CP-3SG.B before.INCL  
 'What did you say before?'

KY: *chäk-äw*  
 hot-NOM  
 'Fever'

E: *7a-ma7 chäk-äw b'a7yk-in t-aw-a7r-aj-Ø ka7chik*  
 DET-NEG1 hot-NOM what-NOM COM-2SG.A-say-CP-3SG.B before.INCL  
 'Fever wasn't what you said'

[HB040905\_2EChK\_7]

Although the knowledge of the addressee motivates the use of *ka7chik*, the perspective of the speaker is still present in (1.2) since EChK disqualifies the response he gets by disagreeing with his son and asking for another utterance to be repeated. By using *ka7chik*, EChK signals that he has reason to think the addressee knows something, on the grounds of what he has already told the speaker, and by assuming that it is mutual knowledge.

To account for the specific conditions for the use of *7uhch* and *ka7ch(ik)*, I propose that the non-temporal semantics of *7uhch* and *ka7ch(ik)* are of a conceptual and/or categorical kind that specifies the perspective of the speech participants. I tentatively call such a category *participant perspective* (see section 3.4). Its conceptual counterpart has been discussed in the literature under the label *inter-subjectivity* (Traugott & Dasher 2002) and *multiple perspective* (Evans 2007). The difference

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represented, the letter abbreviation (in brackets) in the file name will provide this information, EChK = NL, GKY = NL, ChN = NL, AChKYK = SL, CChKY = SL, CChKYJr = SL, KYYM = SL, MChKY = SL, UCLAK (i.e. KYB, CChNK) = SL. Field notes from the PDLMA project (i.e. Field Notes, PDLMA 2005) contain examples of the SL dialect. The examples that are left without file names should be considered as generic, i.e. they apply to both dialects as I understand them. Examples from other Yukatekan languages are stated as such using the abbreviations, YUK for Yukatek, ITZ for Itzaj, and ColYUK for Colonial Yukatek. An exception is if an entire section contains only examples of one such language, in which case this will be stated initially in that section.

between participant perspective and inter-subjectivity is consequently a distinction between category and concept. A concept is not confined to a specific area of grammar whereas a category is grammatically defined in having specific restrictions and possibilities within the larger grammatical structure.

Despite previous observations of a similar kind of semantics to the one I investigate for time words in Lakandon, it has been assigned to the concept of *modality* (see section 3.3). For reasons that I discuss in section 3.4, I do not believe this is an appropriate way to view inter-subjectivity. Languages that are sensitive to participant perspective have been observed by Palmer (1986) who lists Kogi and Nambikwara as two languages that specify the inclusion- or exclusion of the addressee in statements and acts of reference (see section 3.4).

A category marking participant perspective specifies the participant configuration in an act of reference, along with the relationship the participants have to the object of reference. The basic distinction is between a situation that only relates to the speaker and one that includes the addressee in the proposition. This results in a *knowledge (a)symmetry* between the speech participants that in the prototypical case distinguishes between speaker-exclusive and addressee-inclusive, i.e. mutual knowledge. In the investigation I use the labels participant perspective and knowledge asymmetry interchangeably since the former label has yet to be established as a proper categorical label, and the latter provides better associations in the context of describing the semantic values attached to the forms under investigation.

Both *7uhch* and *ka7chik* refer to past eventualities. At the same time, an important aspect of their semantic description is the aforementioned knowledge symmetry that the forms encode. There is no element of possibility, probability, or any other modality parameter present in the meaning of the forms, which makes them easy to separate from other modality particles found in Lakandon.

### **1.2.2 A note on the research perspective**

As stated, my aim is to investigate the grammatical and semantic features of a number of time expressions that play an important role in temporal reference in everyday Lakandon Maya speech. The semantics of a certain form are investigated along with the pragmatic motivations for the form, thus analysing the encoded meaning by taking into account the context wherein it is uttered. However, an effort is also made to discuss

these semantics in light of previously performed investigations of time reference (e.g. Klein 1994; Bohnemeyer 1998).

In addition, I wish to compare the results of my own investigation to available information on cognate forms in Yukatek and Itzaj Maya with regard to form, function and meaning. Part of this comparison will reveal if the analysis that Hanks promotes for Yukatek spatial deixis (see section 3.2 and 5.1) can be applied to, and has relevance for the present investigation.

My objective is not to refute previous analyses and hypotheses regarding the semantics of time reference in language, but to add a dimension that features the speech participants as actors in making reference to events and states, personal and otherwise, that have an obvious function and relevance in the speech situation where the participants find themselves.

This aim emphasises participation and immersion in the everyday life of the speakers in a way that requires sufficient familiarity with speech practices relating to genre, register, and discourse strategies, as well as knowledge about the personal lives of the speakers and hearers, since reference to events, among other things, is sensitive to whether something can be considered as shared or personal knowledge. This results in an interactional approach to language study that partly falls under the sub-discipline of anthropological linguistics but with a retained emphasis on grammatical investigation from theoretical/descriptive linguistics that often is absent from investigations in linguistic anthropology (cf. Duranti 1997, 2004).

## **1.2 Method**

The present investigation is data-driven and empirical in the sense that all the discussions and analyses included here are grounded in natural speech<sup>9</sup>. About eight out of twelve months in the field have been spent recording, transcribing, and translating spoken Lakandon Maya and the result is a corpus of texts in Lakandon Maya with translations in Spanish and English, depending on the level of analysis that a text has been subjected to. All materials have been deposited with the Endangered Languages Archive (ELAR) at SOAS in London<sup>10</sup>.

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<sup>9</sup> "Natural speech" denotes speech that is spontaneously produced, i.e. not subject to questions or questionnaires administered by the researcher, although the situation of recording spoken Lakandon has been subject to ethical and practical limitations that makes completely relaxed and spontaneous speech production close to impossible.

<sup>10</sup> [www.hrelp.org/archive/](http://www.hrelp.org/archive/)

Anyone who has worked with recording and transcribing speech knows that it is a very time consuming business. At the end of the eight months, I have about 15 hours of processed speech that make up the foundation of the investigation as it is presented here. An additional 15 hours remain to be transcribed and translated. A more detailed description of the data is provided in section 1.3, below.

The methodology that I have used to arrive at the analysis promoted here regarding the grammatical properties of deictic time words and their use in time reference largely follows the methodology that Hanks outlines in his investigation of deixis in Yukatek Maya. Hanks is not an innovator in this regard but uses already established approaches to investigating semantics (e.g. Lakoff 1987; Fillmore 1982).

The theoretical aim of the present investigation is to make the semantic analysis as rich as possible by situating the use of the investigated forms in an identifiable context that requires first-hand information on all relevant aspects of the speech situation. It does not seek to reduce the meaning encoded in the forms to more abstract semantic units, but instead focuses on exploring the relevant dimensions of meaning (see section 5.1) found in them. To me, this makes the investigation pragmatic methodically, although the resulting analysis will be concerned with the encoded semantics of the investigated forms.

### **1.2.1 Encoded and Conveyed meaning**

Firstly, conveyed meaning must be separated from encoded meaning. This is not easy, but there are some strategies that serve to give an indication of the kind of meaning found with a certain expression. The division corresponds more or less to the one between pragmatic meaning, i.e. meaning situated in the speech situation, and (truth-conditional) semantic meaning, i.e. meaning that can be separated from a specific context.

Conveyed meaning depends on the specific parameters of the speech situation, such as the configuration of the speech participants and cultural knowledge as it can be seen in the use of metaphors and collocations, whereas part of the encoded meaning is what you typically get e.g. in a context-free translation of a word into a target language. If you name an object or a word in the source language and ask a speaker what it is called in his/her language, you may get a corresponding word<sup>11</sup>. The point being that

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<sup>11</sup> This being said, there are of course a host of problems connected to translation and inter-cultural issues that are far too extensive and complex to get into at this point (see e.g. Quine 1960).

encoded meaning does not change depending on the context where it is uttered. It is consistently regarded in the same way although it may be used in a variety of contexts.

This means that encoded meaning has a low *level of calculability*. It does not take a lot of context to arrive at the encoded meaning of a word, whereas a conveyed meaning in contrast is dependent on also knowing how to interpret the particular context wherein it is used.

Outside of the stability of meaning, at least in the context of deixis, it may be useful to compare the hypothesised semantics of a deictic form to other forms belonging to the category of deixis. If an expression meaning ‘*object* close to speaker’ is attested, then there may be a corresponding form meaning ‘*location* close to speaker’. In English, this correspondence is confirmed by the forms ‘this’ and ‘here’. Semantic proportionality within a category such as deixis is used in the present investigation in support of the claim that knowledge (a)symmetry indeed is an encoded feature of the time words investigated in chapter 5.

A final strategy in the above mentioned regard is *cancellability*. An encoded semantic feature may usually not be cancelled. E.g. if ‘future tense’ was encoded in the expression *b’ihn* in Lakandon Maya, then it would not be available for cancellation, which in fact is the case. In Lakandon Maya it is possible to say, using *b’ihn*, that, ‘Pedro is going to fix the roof, but he is not going to do it’. The reason for the acceptability of such a construction (i.e. the cancellability of *b’ihn*) is because it is more like a modal, than a tense marker. It conveys a future time, but it encodes the expectations of the speaker with regard to the actualisation of some future event (see sections 4.1.3.3 and 5.4.1). Tense encodes the location of an eventuality on the time line, which makes it non-cancellable. If something is located in time, then a negation of that location results in a contradiction.

Pragmatically dependent vocabulary has encoded meaning although it may sometimes resemble conveyed meaning because it resists being sharply defined semantically. The words ‘now’ and ‘today’ are a case in point. The meaning of ‘present-ness’ in ‘today’ can be extended almost indefinitely depending on its use: “Millions of years ago, the world was ruled by dinosaurs. *Today* they are still present in their descendants, the birds, although they bare little resemblance to their ancestors”. ‘Today’ in this context encompasses much of the time from the disappearance of the Dinosaurs 65 million years ago up until present time. Such a perspective is quite different from the

diurnal calendar meaning of the word that is contrasted to words like 'yesterday' and 'tomorrow'.

The difference in meaning is not necessarily a difference between encoded- and conveyed meaning, however, and the semantic feature that allows a wide temporal range in an expression like 'today' may be something like 'relative temporal immediacy', which means that the discourse frame where 'today' is used, determines its temporal range. The argument can be made that the wide range of uses of 'now' and 'today' is reflected in a semantic shift of emphasis where the diurnal meaning has become secondary to the one denoting relative temporal immediacy. The point I wish to make is that sensitivity to context does not automatically indicate conveyed meaning although in some cases, this is exactly what it does.

### **1.2.2 A prototype approach to deixis**

Hanks takes frame semantics (semantics of understanding, see Fillmore 1985) and prototype theory as a starting point for investigating the semantics of Yukatek deixis, following Fillmore (1982) and Lakoff (1987), among others. The frame semantics approach allows for a semantic description to be situated in a larger frame of reference and argues for an understanding of lexically encoded meaning by knowing the frame where it is used. To know the meaning of a word means knowing related concepts and ideas that are necessary for decoding the semantic content of that word.

Prototype theory stands in contrast to other formalist theories that deal with necessary and sufficient features. It allows for a range of uses and less salient meanings to be compared and understood in light of what can be regarded as the most prototypical meaning of a word.

Hanks lists four strategies that can be used to determine the prototypical meaning of an expression: 1) *Variability*, 2) *Weighting*, 3) *Actional context*, and 4) *Native judgements*.

Variability means that there usually is a range of functions available for a specific expression. These are worth exploring since they provide a semantic dimension to the meaning of an expression. As we will see in chapter 5, the communicative functions that belong to certain deictic particles are sometimes completely predictable from the other semantic dimensions, i.e. the *indexical ground* and the *relational values* (see section 5.1).

A strategy that follows from observing the variability of use, is *weighting* a semantic feature. Weighting means that a semantic feature may be more or less peripheral with regard to the prototypical meaning of a word. Features from one dimension of meaning may be more salient than those from another dimension. Typically, relational values weigh more than the ones belonging to the indexical ground. This does, however, not make the latter irrelevant or less important for determining the meaning of a deictic expression.

Actional Context is a way of mapping the prototypical meaning of an expression onto its appropriate use. Certain schematic uses will contribute to the understanding of an expression and help to determine its prototypical meaning. This idea connects the common use of a form with core features of its meaning. Actional context of course closely corresponds to the communicative function of an expression since both concepts are relevant to the specific contextual use of an expression and the effect that it has on the speech participants.

The fourth and final strategy takes into account native judgements, i.e. what speakers regard as a good, or typical use of a form. Considering these judgements is of course different from letting speakers *give* you the meaning of an expression. This strategy can only be used together with the other three, but it can be useful at both ends of an investigation, at the outset when you have little knowledge about what a word means, and again at the end when you have formed one or several hypotheses that you want to check or try to falsify. Speakers have good intuitions about the appropriate use for a word even though they may be hard pressed to provide the researcher with a direct translation.

### **1.2.3 An illustration: *7uhch***

Here I wish to give the reader a concrete example of how I have gone about investigating the meaning of a specific expression, *7uhch* ('before', 'long ago'), that I was familiar with from the literature on Yukatek and Itzaj at the outset of my own investigation.

I began by observing how *7uhch* occurred in texts that consisted of recorded and processed, spontaneous Lakandon speech and how its use corresponded to what I had seen with respect to cognates of the same word in the other Yukatekan languages, Yukatek and Itzaj. I almost immediately noticed a discrepancy between the syntactic placement of *7uhch* and the frequency of its use in texts when I compared it, primarily,



to the distribution of the cognate *7uch* in Itzaj Maya texts (Hofling 1982). At a later stage, a similar difference was noted in comparison to texts of Yukatek Maya (Vapnarsky 1999).

My next observation revealed another discrepancy, namely one where Lakandon speakers frequently used *7uhch* in some contexts and hardly at all in others. I primarily considered the meaning of *7uhch* in terms of temporality since that was how I had seen it described for Yukatek and Itzaj, but I could not match such an interpretation with the way *7uhch* was being used by Lakandon speakers; the temporal context appeared identical between two texts, but one had *7uhch* throughout, while *7uhch* was completely absent in the other.

From grammatical evidence, i.e. the interaction between aspect and status marking and how that interaction relates to categories such as tense, aspect, and modality, and from the apparently arbitrary use of *7uhch* as an adverbial, I discarded the idea that it had the function of a tense marker. Bohnemeyer's investigation of tense marking and event order in Yukatek Maya supports this analysis (see section 3.1.1; 4.1.3; Bohnemeyer 1998).

I then considered the possibility that *7uhch* may in fact be an evidential marker of some sort and that its use depended on *information source* or the *epistemic perspective* of the speaker. Hanks reports the presence of evidential features of meaning in ostensive reference in Yukatek, which meant that the concept of evidentiality is present and attested in a closely related language (Hanks 1984). Despite this fact, I had to abandon the idea that information source was a decisive factor in using *7uhch* since a speaker could use it to mark information unspecified for a source. At that point I thought the concept of *epistemic modality* matched the use and distribution of *7uhch* better than both evidentiality and tense. This view of the semantics of *7uhch* is argued for in Bergqvist (2006).

It was not until after I had thoroughly investigated the grammatical properties and distribution of *7uhch*, that I encountered the contrastive *ka7ch/kuhch*. The use of these contrastive markers shifted my understanding of how temporally grounded reference to events is made in Lakandon Maya. A look at the contrastive use of *ka7ch/kuhch* in comparison to *7uhch* confirmed that the location of an event in time was not a salient semantic feature that could be used to tease the expressions apart, something that I had expected from my previous analysis of *7uhch*, anyway. This hypothesis was supported by the fact that speakers translated them identically using the Spanish word, 'antes'

(‘before’, ‘previously’). The similarity in translation was, however, not reflected by the distribution of *ka7ch/kuhch* and *7uhch*.

I continued to entertain the idea that the semantics of *ka7ch/kuhch* and *7uhch* could be explained in terms of modality until I took a closer look at the components of the modality concept itself. When I could not find the appropriate place for the three expressions and their semantic definition within the modality concept, I began looking for other ways to describe what was going on with regard to these expressions. I include a discussion of my ideas in this respect in section 3.4.

At every turn of the investigation I tried to falsify my own ideas and hypotheses. In addition to considering various established categories for harbouring the semantics and function of *7uhch*, I asked for speaker judgements and intuitions regarding its use as well as observing variation in the translation of *7uhch*. I wish to avoid promoting empty theories about the use and meaning of expressions that have no grounding in how speakers of Lakandon use the same expressions. What gives me the most confidence in presenting the analysis found in chapters 5 and 6 is the fact that the use and occurrence of *7uhch* and *ka7chik/kuhch* in many cases can be predicted and that those occurrences map well with the analysis that I promote in the present investigation. In fact, I have yet to come up with a counter example to my analysis.

#### **1.2.4 Investigating pragmatically anchored vocabulary**

There are several problems with investigating vocabulary that is pragmatically anchored. One is that speakers may not have very good intuitions about the semantics of such words and although they, of course, know how to use them they may lack the meta-language to discuss their meaning in a way that corresponds to their function and use.

The primary source of evidence for the meaning of words that describe the speech situation and its participant configuration comes from their distribution in discourse. From observing how a word is used, one can form a hypothesis about its meaning. After having formed a hypothesis regarding the meaning and function of a word, the strategy is to check this hypothesis by coming up with ways to contrast one use of the word with another, and thereby hopefully get some indication of grammaticality or non-grammaticality. This apparently straightforward strategy is, however, fraught with problems when investigating pragmatically dependent vocabulary.

When two words are contrasted only with regard to the configuration of the speech participants and their individual knowledge, it would seem natural to construct two opposing hypothetical situations where one word is the obvious choice and the other is not. For this scenario to work, however, all interference must be eliminated that could alter the perception of the hypothetical situation. This is difficult. More often than not you will get both words accepted in both contexts for the simple reason that they both sound fine to the speaker. The pre-established contextual contrast may not be strong enough to allow a rejection of either word. The speaker is essentially asked to keep two hypothetical speech participants' point of view in mind. The success of this strategy depends completely on how strongly you are able to anchor a hypothetical speech situation in the mind of the speaker.

A strategy that worked better for me was to ask the speaker if he could give me an example of how he would use one of the words and then exchange the word in question, given in the provided example, with the contrastive word. This was not guaranteed to work either. If all that is at stake is how two speech participants relate to some event, exchanging either word for the other will not generate an ungrammatical construction, and may therefore be accepted by the speaker.

A problem that sometimes is overlooked because it is hard to get around is the consequences of elicitation as a tool for gaining understanding of the meaning and function of vocabulary. In addition to the issues that Matthewson (2004) discusses with regard to doing fieldwork on semantics, a speaker may not draw the line for ungrammaticality where the researcher would expect. One may be under the impression that a construction either works grammatically, or not. The speaker, on the other hand may "stretch" his tolerance for "ungrammaticality" because he considers you a learner of the language, or because after two hours of constant questioning he may not be as sensitive to the unusualness of a certain expression as he was one hour earlier. You will have to ask the same questions several times on separate occasions to get around this problem and then, by means of inference and comparison, determine the (encoded) meaning and function of a particular word.

Pragmatic parameters of meaning are not discrete, nor digital, in the sense that two conceptually contrasting lexemes may in fact be allowed in the same discourse context because all that is needed for them to be accepted is a slight alteration of the attitudes of one of the speech participants. What is at stake is not ungrammaticality, but

a choice of perspective by the speaker with regard to the addressee and the speech situation as a whole.

These problems aside, the semantic investigation of pragmatically anchored vocabulary does not make the results of such an inquiry flaky or arbitrary, but only represents a methodological challenge with regard to the kinds of answers one can expect a research strategy to yield. I will not pursue a solution to the problem of non-discreteness that a pragmatic investigation may impose on its results.

### **1.3 Data and Analysis**

This section includes a presentation of the data: how it was collected, what it consists of, and how it was processed. It also discusses the analysis of that data in terms of collaboration with speakers and the problem of translation.

#### **1.3.1 The importance of data**

The data and the analysis of the data are, of course, very important for the present investigation. There are two reasons for this; firstly, because the present investigation was done as part of a project to document Lakandon Maya. This means that the quality of both the recordings of speech and the processing of those recordings was made with archiving in mind. Archiving of documentation materials is one of the most important aspects of language documentation since it makes the materials accessible to the wider research community and ideally to the community of speakers that helped in creating them, in addition to ensuring their long-term preservation. A certain level of quality of the recordings was for this reason expected from the Endangered Languages Documentation Programme (ELDP), which was the granting agency for this project.

It is also important that the gathered materials result in a diverse sample (cf. Himmelmann 2006), coming from several different speakers and of different speech genres so that it may represent as big a slice of the language as possible. Having said this, it is of course impossible to represent more than a miniscule part of what constitutes a language even with as few speakers as Lakandon. Still, an effort at capturing as much as possible of the variety of speech that is produced every day by the speakers must be attempted.

A second reason for the importance of a good quality data set is due to the nature of this investigation. My aim, as stated above, is to situate the use and meaning of time words in a speech context, which of course means that I need a varied and good-sized

sample of recorded Lakandon speech in order to be able to carry out the investigation. It would e.g. mean a halting analysis indeed to work with language materials from only one speaker and having that speaker talk only about one topic.

### 1.3.2 Speech genres

Because of the considerations relevant to the present work, I made an effort to work with speakers from different parts of the community of Lacanjá Chan Sayab, with speakers of different ages, and to record them in various settings and configurations (some intentional and some not), in order to obtain recordings of speech that belong to each of the speech genres presented in Hofling (1982), i.e. *personal narrative*; *traditional- or folk tales*; *expository discourse*; and *conversation*. Because of the low number of Lakandon Maya speakers, the collected documentation materials represent almost 2% of the population of speakers in Lacanjá Chan Sayab where I did most of my fieldwork.

Personal narratives are stories that refer to events that can be personally related to the speaker either from having experienced something directly or from simply knowing something that relates to the speaker and his/her immediate family. They are generally first hand accounts that may include stretches of reported speech as well as quotations.

Folk tales include mythical accounts about the origin of the inhabited world of the speakers, as well as fables, tales of morality, and songs connected to religious beliefs and/or traditional concepts and ideas. They may be told using a variety of strategies depending on who tells them. Interestingly, Northern Lakandon speakers will usually name the person who told him/her a story at the outset of the story and then proceed to tell it without using any further qualifications. Speakers of the southern dialect, on the other hand, will usually tell the story without referring to a specific person as the source of the story and instead use the hearsay marker (*b'in*) or a marker like *7uhch*, depending on the *footing* (Goffman 1981) the speaker wishes to adopt with regard to the story *and* the listener.

Expository discourse constitutes explanations about how something is done, such as building a house, planting a cornfield, tying a basket, or making arrows for hunting. It describes step by step, the procedure for doing something but often includes reference (at least in Lakandon Maya) to how the person learned to do something, i.e. who taught him and what the instructing person told him on that occasion.

Lastly, conversation is the default speech genre of which all others are specialised forms. It denotes a speech situation including two or more speakers that engage in an exchange that may include any or all strategies for presenting, asking for, or questioning information. This genre cannot be defined in terms of manner of presentation or by the contents of the information presented, but simply by the engagement of more than one speaker in an interaction of a verbal nature (although often not exclusively so).

### **1.3.3 Processing procedure**

The recordings were made using a Sony Mini-Disc (MD). The reason for using this machine despite its many drawbacks can be attributed to robustness, both with regard to the actual construction of the apparatus and the fact that it has been around for a while and has proved reliable, as well as by simple availability and ease-of-use.

I used a Sony stereo active condensate microphone with the MD that was both sensitive and adjustable with regard to direction of absorption. It was easy to use and produced a good clear representation that was close to how I had perceived the sound environment of the recording.

The recordings were transferred from the digital format of the MD recording to a laptop that also contained the programs and softwares that I used for processing the recordings. The transferring software is called "Sound forge"; the transcription program, "Transcriber", which is free-ware that can be downloaded in several versions on the Internet. The translation of the transcriptions was made in a template-formatted document in MS Notepad that was imported into the Shoebox software.

After having transferred a recording onto the laptop computer, I imported it into Transcriber. Without transcribing anything, I divided the recording into smaller units that appears visually as a line-by-line segmentation of the recording although Transcriber only assigns time codes to the recording without actually dividing it. With the help of a speaker I then transcribed the whole recording, which resulted in a digital transcription file in Lakandon Maya. Once this was accomplished, more attention was paid to adjusting the transcription into proper units of speech (cf. Chafe 1994).

The next step was to import the transcription file into the Shoebox template that I had created for representing the processed recording. This was done by copying and pasting, line by line from Transcriber to the template in Notepad. This process meant having to listen back to the transcribed line again, getting the chance to revise the transcription while at the same time adding the translation.

Simultaneous with the translation of the recording, I took notes of things that were relevant to topics that I was working on at the time, or that somehow caught my eye either by being “new” forms or by appearing as opaque constructions that I needed to look more closely at. Throughout the working process I also kept a “working log” of my activities, something I picked up from being a member of the PDLMA project<sup>12</sup>.

As stated in section 1.2, the resulting database consists of about 15 hours of processed speech and an additional 15 hours that remain to be transcribed and translated. I have processed recordings of all four speech genres outlined above in 1.3.2, but there is a bias towards traditional stories and personal narratives. Conversations are the hardest to get on tape and almost all the ones I have are the result of accidents, either from people showing up unannounced or from a traditional story telling turning into a semi-conversation and discussion about how the story actually goes with two speakers present. I always asked permission before making a recording and in the few cases where the MD was already running, I informed the speakers that were unaware of this, of what we were doing, thus asking for permission on the run.

#### **1.3.4 The role of translation in the analysis**

All provided translations that accompany examples of Lakandon speech in the present investigation are in English. The speakers of course only gave me translations in the variety of Spanish that is spoken in Chiapas, which in many respects is different from Standard Spanish as I learned it. Both the syntax and the vocabulary are influenced by the Mayan languages that are spoken throughout the region, which is something that, initially, took some getting used to.

I have devoted a lot of care and attention to getting the translations to both reflect the original translation that the speakers provided me with in the process of working with the transcriptions, and to match my analysis and understanding of the phrase as it was transcribed in Lakandon Maya. These two considerations seldom conflict and when they do I have included the translation in Spanish directly below the English one.

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<sup>12</sup> The “Project for the Documentation of the Languages of Meso-America” (PDLMA) is directed by Terry Kaufman, John Justeson, and Roberto Zavala. It has been operating out of Mexico (Catemaco, Veracruz and San Cristóbal de las Casas, Chiapas) since 1994, and has made dictionaries of some 35 indigenous Mesoamerican languages. As accounted for in chapter 2, below, it was my being a member of this project that led to the subsequent work on Lakandon Maya that the present investigation is concerned with.

However, when I give the translation of an isolated word or expression in English, that is always a direct translation of the Spanish word that I was given during the initial transcription-translation process or during direct elicitation.

The process of transcribing and translating the recordings of Lakandon speech was instrumental to identifying examples of specific time words, but several translations given me by the language consultants I was working with, appeared not to match the use and function of the words that they corresponded to. Sometimes the translations appeared misleading, but I always assumed that they were both systematic and instrumental in providing clues to how, when, and why the time expressions under investigation are used.

The problem of translation is only a problem if one is unaware of the kinds of answers one can obtain from it. One cannot regard translations as an analysis provided by the speaker. The analysis must always be performed by the investigator. As Matthewson (2004) observes, “[t]ranslations are a clue, not a result” (ibid: 391), nor can a translation tell you anything about *all* the possible uses and shades of meaning that an expression has.

I have looked at the system for making speaker-dependent temporal reference (see section 5.1.2.4) on a level of detail that only uses translations (or non-translations) to provide me with pointers and hypotheses regarding the meaning and use of such time deictics, but it does not constitute the analysis, nor does it play a decisive role in the formulation and the content of it.

## **1.4 Structure of the thesis**

Chapter 2 contains an introduction to the Lakandon Maya language, culture, and some of its speakers. First, however, is a brief presentation of some of the secondary sources that have been available to me on Yukatekan languages in general and Lakandon Maya in particular (2.1). The following section (2.2) provides a basic summary of the history and the cultural context of the Lakandones together with a mention of the observable differences between Southern- and Northern Lakandones. In this context I place my own observations of life in Lacanjá Chan Sayab and how they compare to the previous descriptions that I have read regarding “traditional” Lakandon culture and history. Included is also a description of the lineage of one of my language consultants to serve as an illustration of the already mentioned history of the Southern Lakandones. In section 2.3, I describe the conditions and prerequisites for the documentation of



Lakandon Maya and I also present some of the participants of the documentation both for the sake of keeping with documentation practices and because of the chosen research perspective. The last section is a sketch grammar that details some of the basic grammatical properties of the language, saving the description of the particle word class and the system for aspect-mood marking, for chapter 4.

Chapter 3 makes up the theoretical background for the analysis and discussion in chapters 5 and 6. Given the goals of the investigation (1.1), time reference in language is not only discussed in terms of *tense* and *event-order* (3.1.1), but also includes an attempt to map the differences between anthropological and linguistic investigations of time (3.1.2; 3.1.3; 3.1.4) that have been largely skirted, at least with respect to linguistics. Following in section 3.2, is a presentation and discussion of the phenomenological concept of *A- and B-series time* (3.2.1) and the topic of *time deixis* (3.2.2). Next is an introduction of the concept/category of modality (3.3). This section is included in order to provide a backdrop against which the following semantic analysis of Lakandon time words can be situated. The discussion of modality leads to the formulation of a separate qualificational category (cf. Lyons 1977), tentatively called *participant perspective*, that more closely matches the analysis and interpretation of speaker-dependent time reference promoted in chapters 5 and 6.

Chapter 4 deals with the grammatical expression of time reference in Lakandon Maya with frequent reference and comparison to the other Yukatekan languages, most prominently Yukatek proper. The system for aspect-mood (AM) and status marking is described first (4.1) illustrating the formal separation between the two concepts. Resulting from this description is the argument that Lakandon Maya (and Yukatek Maya, cf. Bohnemeyer 1998) lacks the category of tense, an argument that is motivated by the use and meaning of AM-markers. Then follows an attempt at a definition of the particle word class (4.2) that has received comparatively little attention in the Mayan literature while at the same time being important to the present investigation. Having established the workings of the system for AM-marking and the properties of the particle word class, I proceed to propose a preliminary classification of introduced time words and how they can be grouped together by their grammatical properties. Lastly, I investigate and discuss the system for deixis in Yukatek and how that system is reflected in Lakandon with regard to form and meaning, thereby setting up later comparisons between non-temporal parts of the system for making deictic reference to temporal ones.

Chapter 5 contains the semantic analysis of forms that are commonly used in making temporal reference in everyday Lakandon Maya speech. It constitutes the main part of the investigation although the results of it are summarized in chapter 6. The chapter is divided into six sub-sections, the first of which conceptually explains deixis and the semantic make-up of the forms that are central to making deictic, temporal reference (5.1). In this section I also propose a division between speaker- and event-perspective in time reference. The labels are motivated by the underlying perspective and motivations for making temporally situated reference to some event that only partly can be understood from the view point of temporality. In sections 5.2 and 5.3, I investigate “present” and “past” forms, respectively, belonging to the speaker-perspective. Section 5.4 is divided in that one half is concerned with speaker-perspective forms, while the other describes forms belonging to the event-perspective. Section 5.5 is devoted to describing event-perspective forms used to denote “dependency on other events” and the last section (5.6) discusses the role of metaphor in interpreting and understanding time reference in Lakandon Maya, connecting it to what was discussed in section 3.1.1.3.

Chapter 6 is a summary and discussion of the results as they stand in the analysis of chapter 5. First is an attempt to arrive at a coherent picture of time reference from both speaker- and event-perspectives (6.1). Second is a look at how the semantics may have changed alongside of a grammatical development in one form in particular, *7uhch*, which possibly is central for the changes as they are proposed with respect to Lakandon Maya. To map these changes, comparisons are made to Modern- and Colonial Yukatek (6.2). Following this proposal is a discussion of the A- and B-series time concept and how that compares to the division of forms into speaker- and event-perspectives (6.3). The semantic changes are further discussed in section 6.4 with respect to encoded and conveyed meaning and the conceptual similarities existing between *temporal distance* and *knowledge access*, which may explain the resulting changes. A summary of answers to some of the questions that were posed at the outset of the investigation concludes the thesis.

## 2. Lakandon Maya language and culture

This chapter serves to situate the analysis found in the main part of the investigation, presented in chapter 5. Some of its contents are in part motivated by convention since a description of specific grammatical processes in an underdescribed language requires a certain amount of general background information on the culture of the speakers as well as the general characteristics of the language itself. However, the primary reason for including information of a non-linguistic nature on the speakers of Lakandon must be attributed to the research perspective of the present investigation. The analysis presented in chapter 5 requires that the participants of the documentation effort that the thesis is built on, are made visible and that part of their culture is at least rudimentarily presented.

Having said this, several of the topics discussed in this chapter call for more room than the format of a dissertation can afford. The ethnographic background of the people who helped me investigate their language and a description of their everyday life in south-eastern Chiapas will not be given as much room as I would have liked. With regard to this fact, I must add that most of the work that has been done by others on the Lakandones has been devoted to describing religious practices and beliefs, the history of the region, and the traditional material culture of the Lakandones (cf. Baer & Merrifield 1971; Bruce 1971, 1974, 1975, 1976; Boremanse 1974, 1978, 1979, 1981; De Vos 1980, 1988, 2002).

Section 2.1 presents a classification of the Yukatekan languages within the Mayan language family and comments on some existing linguistic descriptions of Yukatekan languages in general and Lakandon in particular. Section 2.2 is a brief description of the history of the Lakandones as well as an account of present-day life in Lacanjá Chan Sayab where I spent most of my time in the field. The following section 2.3 describes the setting for the work that I have done on Lakandon up to this point and comments on the documentation practices that have guided the investigation.

The last section, 2.4, is a description of important grammatical properties and processes of the Lakandon Maya language. It reflects my current understanding of the language and is based on the material that I have gathered in the field and on additional material that has been made available to me by other researchers, most notably by Una Canger at the University of Copenhagen.

## **2.1 The Yucatekan languages**

A great deal of literature is available on Mayan languages in general and on Yucatek in particular. For a survey of Mayan linguistics, see Campbell and Kaufman (1985). Below, the Yucatekan languages are classified within the larger Mayan language family and some comments on the usefulness of certain works on Yucatekan languages are presented here as well as a discussion of linguistic work on Lakandon that I am familiar with. This presentation is not meant as a critical bibliography and the cited works are by no means the only ones in existence. There are several other sources, published and unpublished, that I have been unable to obtain or that I am presently unaware of.

### **2.1.1 Yucatekan languages and the Mayan language family**

Mayan languages are spoken by more than 2 million in the southern parts of Mexico, Guatemala, and Belize. Some of the languages have as many as a million speakers (K'iche') while a language like Lakandon only has a few hundred (Kaufman 1990; see chapter 1, above). A map of the region where Mayan languages are spoken and their distribution is included here with the region of the Lakandon Maya language marked by a dotted circle:



“Eastern”- and “Western Mayan” separation is maintained, however, although the Western branch is called the “Core Mayan” branch. An overall structure of the Mayan language family tree, drawn after the classification in Campbell 1997, is shown below:

1. Wastekan
2. Yukatekan-Core Mayan
  - 2.1 Yukatekan (Yukatek, Lakandon, Itzaj, Mopan)
  - 2.2 Core Mayan
    - 2.2.1 Cholan-Tzeltalan (i.e. Western Mayan)
      - 2.2.1.1 Cholan
      - 2.2.1.2 Tzeltalan
    - 2.2.2 Q'anjob'alan-Chujean
      - 2.2.2.1 Q'anjobalan
      - 2.2.2.2 Chujean
    - 2.2.3 K'ichean-Mamean (i.e. Eastern Mayan)
      - 2.2.3.1 K'ichean
      - 2.2.3.2 Mamean

FIGURE 2.1 THE MAYAN LANGUAGE FAMILY TREE (AFTER CAMPBELL AND KAUFMAN 1985, IN CAMPBELL 1997: 163)

Kaufman groups Yukatek, Lakandon and Itzaj together, calling them “Yukatek plus”, and places Mopan by itself because of its many divergent grammatical features compared to the other three Yukatekan languages (Kaufman 1991: 109).

### 2.1.2 Yukatek, Itzaj, and Mopan

The first notable effort at a grammatical description of modern Yukatek is Alfred Tozzer's grammar from 1921. Like his colonial predecessors, Tozzer does not represent the lexical tone of Yukatek, which compromises his data from a comparative perspective. Tozzer uses the colonial grammars for reference and illustrates grammatical operations in modern Yukatek by comparing them what was reported for Colonial Yukatek. In the grammar, Tozzer comments that Lakandon Maya is so closely related to Yukatek proper that the two languages should be considered near identical. He also includes some Lakandon chants in the back of the grammar.

The most well known and one of the most frequently cited works on Yukatek is Robert Blair's dissertation from 1964. It is a compact structural analysis of the phonology and the morphology of Yukatek and has tone marked consistently throughout. Blair's work is a landmark in the study of Yukatek and it is a very useful description of the basic morpho-phonological operations of the language.

Norman McQuown (1967) provides a structural sketch of Colonial Yukatek. His presentation of data is even more condensed in its layout and structure than Blair's. I find it hard to use as a basic tool for coming to grips initially with Yukatekan language structure, but it is authoritative and well informed given McQuown's extensive knowledge and experience of Yukatek and Mesoamerican languages in a more general sense.

Recent works on Yukatek includes William Hanks' many publications (Hanks 1983; 1984; 1990). Most notably, Hanks has focused on describing aspects of language use and pragmato-semantic accounts of Yukatek deixis and speech practices (Hanks 1990; 1993). Hanks' work on Yukatek has influenced the present investigation a great deal and although anthropologically oriented in style, it is of high quality linguistically, as Hanks displays an impressive grasp of the grammatical structure of Yukatek as well as of how it is used by its speakers.

Victoria Bricker et al.'s dictionary (Bricker et al. 1998) is a second landmark in the documentation of Yukatek. It consists of some 5000 entries, which makes it the largest source for lexical information on Yukatek with tone marked throughout. Included is also a grammatical sketch that provides easy access to inflectional and derivational morphology. Bricker has published a lot on Yukatek (e.g. 1979, 1981a, 1981b) but the dictionary is the most important contribution so far for the study of the language. I have used it extensively for comparison of vocabulary between Lakandon and Yukatek.

I have also had great use of a manuscript called "Notes on Yukateko" (Kaufman 1991) that Terry Kaufman made available to me. It is a structural sketch in the tradition of Blair and McQuown, but has a larger scope than both of these since it includes information on all Yukatekan languages and thus works as a comparative structural analysis.

A work that has to be noted for a number of reasons is Bohnemeyer's seminal work on time relations in discourse as compared between Yukatek Maya and German (Bohnemeyer 1998). Firstly, it deals with the topic that the present investigation is centred around, and secondly the level of detail included in the examination of grammatical processes of Yukatek is unparalleled, especially when it comes to the verb phrase, which of course is of central interest for anyone investigating a Mayan language like Yukatek. Bohnemeyer's work will be referred to extensively throughout the investigation.

A second, unpublished study of time relations in Yukatek is Valentina Vapnarsky's dissertation (Vapnarsky 1999). She includes glossed texts of transcribed speech in an appendix to the dissertation, which made it possible to compare the use of certain expressions in Yukatek and Lakandon.

The brief list of grammatical descriptions and works on Yukatek, above, are those that I have used to guide me in understanding Yukatek grammar more generally, but also with the topic of the present study in mind. There are of course many other accounts and descriptions that deal with particular aspects of Yukatek grammar, or specific processes therein (e.g. Lehmann 1993, 1998, 2000; Vapnarsky & Lois 2003; Lucy 1992a, 1994; Bohnemeyer 2001) but these works deserve more space than I can afford to be properly commented on.

Works on Itzaj and Mopan Maya that must be mentioned are Andrew Hofling's stand-alone documentation of Itzaj, which he has devoted some 20 years to accomplish (e.g. Hofling 1991; 1997; 2000). Hofling's collection of texts, dictionary, and full reference grammar constitutes a wealth of information on a language that is all but extinct.

Eve Danziger has published material on Mopan (Danziger 1994; 1996; 2001), although not including a basic grammatical description of the language, as far as I know. Terry Kaufman has given me a wordlist of Mopan, containing some 2000 entries, in a Shoebox format (Kaufman 1971).

### **2.1.3 Lakandon Maya**

In comparison to the grammatical descriptions that are available for Yukatek, there is very little grammatical information on Lakandon even though the anthropologist Roberto Bruce devoted considerable time to investigate both the Lakandon language and culture during the 1960s and 70s. Bruce's grammatical description from 1968 is, however, less useful than any of the descriptions of Yukatek mentioned above in aiding an understanding of the structure of Lakandon. There are several reasons; it fails to make comparisons between Lakandon and Yukatek proper and it is careless in representing vowel quality both with regard to length and tone, the latter being completely absent. The grammatical operations and the fundamental linguistic structure are also explained in an idiosyncratic way that veils the basic properties of the language.

Although lexical tone and vowel length may not carry a high degree of grammatical information in Yukatek or Lakandon, it is still present in grammatical



processes such as passivisation and possession, and must therefore be included in any proper grammatical description of the language.

Apparently, Bruce had a dictionary and other linguistically oriented publications planned (e.g. collections of texts) when he wrote the grammar, but they were never published and the materials that he must have assembled over more than three decades are presently unavailable to researchers. I have made efforts to locate some of his recordings and manuscripts but have so far been unsuccessful.

Una Canger worked for a comparatively short time on the language but managed to produce a root dictionary, a collection of texts, and a great deal of notes on the southern dialect of Lakandon<sup>13</sup> as it was spoken in the San Quintín region (Canger 1970a; 1970b; 1970c). Canger consistently represents tone in her dictionary and her linguistic analysis is well informed by her knowledge of both linguistics and Mayan languages in general. All Canger's materials remain unpublished but they have generously been made available to me. They constitute an important part of the corpus that I have assembled and that I have used to investigate grammatical and pragmatic phenomena.

The most recent work, aside from my own, is the Lakandon Cultural Heritage Project funded by the Volkswagen Stiftung, which has promised to document the Northern dialect of Lakandon spoken in Najá through media formats such as DVD and digital audio recordings. An extensive linguistic analysis of the northern dialect should be available shortly as a companion to the wider documentation corpus. To date I have not been able to evaluate the quality or content of the documentation but one should have high expectations for a project of that scope both with regard to its resources and its participants (<http://web.uvic.ca/lakandon/>). It appears to me that Lakandon indeed is very similar to Yukatek in most areas of its grammar, which is why a familiarity with Yukatek is a good starting point in describing Lakandon. Many of the morphological processes and markers that are attested for Yukatek are preserved in Lakandon, as is most of the phonology, most notably the lexical tone with a high-low contrast, which has been lost in both Itzaj and Mopan<sup>14</sup>.

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<sup>13</sup> The dialect division of Lakandon into a southern and a northern dialect is abbreviated into SL and NL, respectively.

<sup>14</sup> Valentina Vapnarsky (p.c.) has suggested that tone might have been an invention only in Yuktek proper and that the issue of "loss of tone" in Itzaj is not the ideal way to interpret the situation with regard to the distribution of tone in Yukatekan languages (see also Vapnarsky & Lois 2003).

There are lexical differences on a basic level of the vocabulary, which sometimes are due to vocabulary loss in Yukatek (e.g. kinship terms), caused by influence from Spanish, and sometimes result from language internal changes in Lakandon or influence from neighbouring Mayan languages<sup>15</sup>.

## **2.2 The culture and history of the Lakandon**

As for the description of the Yukatek language, modern descriptions of Lakandon (and Yukatek) culture start with Alfred Tozzer (1907). Tozzer performed a comparative investigation of the Mayas of Yucatan and the Lakandon of Chiapas at the turn of the century. He spent time with the Northern Lakandon of Najá, but also met Lakandon from the southern groups. Tozzer compares several areas of Yukatek and Lakandon culture as the notion was conceived in the early 20<sup>th</sup> century, focusing on means of sustenance, habitat, religion, and physical appearance. As stated above, Tozzer also notes linguistic similarities between Yukatek and Lakandon, and regards them as identical languages.

Present-day Lakandon are almost certainly not descendants of the “historical Lakandon” who were a fierce group of Cholan speakers that finally succumbed to the Spaniards in 1695 (de Vos 1980 in Trench 2002: 61). Jan de Vos (1980) draws the conclusion that the latter belonged to a different linguistic group from a comparison of names between the inhabitants of the island where the Cholan Lakandon lived before their defeat to the Spaniards, to modern names of Yukatek-speaking Lakandon.

The Spanish name “Lacandón” is supposedly etymologically derived from the (Cholan?) words *akan tun*, meaning ‘great rock’, to designate the island in Lake Miramar, also called Lake Lakandon, where the Cholan Lakandon lived (Boremanse 1998: 3). This etymology is however not transparent with regard to Lakandon Maya as it is spoken today.

“Lacandón” appears to have been a term used to designate several different indigenous groups living in the mostly uncharted south-eastern parts of Chiapas during colonial times. Used in this way, Lacandón is a geographical term used to refer

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<sup>15</sup> Swadesh (1967) places the break between Yukatek and Lakandon at 600 years ago using lexicostatistic methods (ibid: 99). Even aside from the actual methodology of lexicostatistics, which is considered by many as highly unreliable (cf. Campbell 1997 for a critique), the lexical material supporting the results must have been scant, given the amount of research that had been done on Lakandon at the time. It is of course possible that Swadesh had access to wordlists that were unpublished at the time or that he collected the materials he needed by himself.

to all indigenous people of the area rather than denoting any specific indigenous ethnic group.

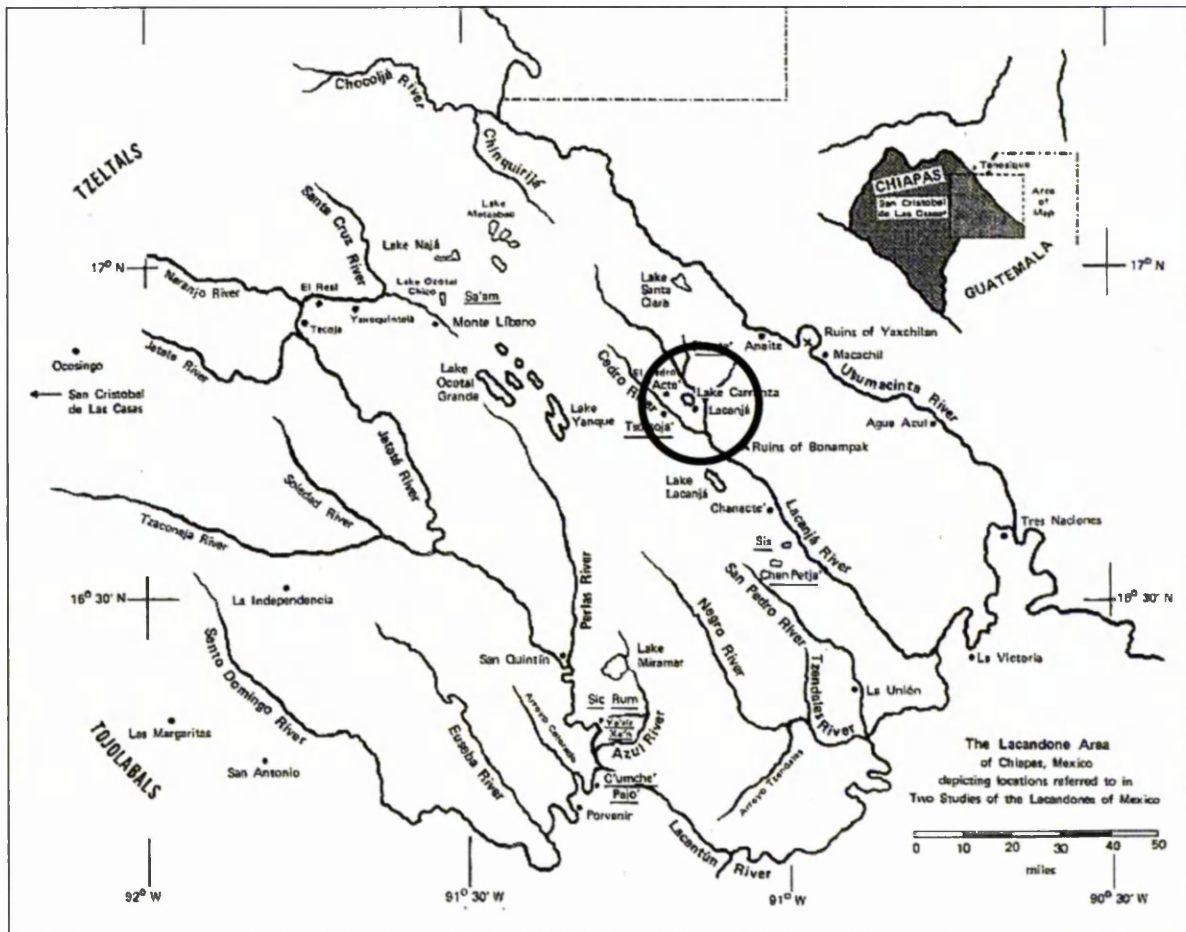
It is however quite probable that a group of ancestors to the present-day Yukatek speaking Lakandonnes lived in the region south of Palenque, west of the river Usumacinta, by the end of the 18<sup>th</sup> century when a group of them was convinced by a catholic priest to settle near a village outside of Palenque for a short time. Aside from that early attested contact with Spanish speaking Mexicans, interaction between Yukatek-speaking Lakandonnes and Spanish-speaking mestisos appears to have been low and intentionally avoided by the Lakandonnes (but see de Vos 1980, for a contrasting opinion).

Linguistically, such a low degree of contact is supported by the fact that Lakandon only has a handful of older loan words, i.e. from the 16<sup>th</sup> to the 19<sup>th</sup> century, that have come from Spanish. Judging from their phonological form, they may have been acquired by contact with speakers of other Mayan languages, who had more contact with the Spanish speaking population and were assimilated into Mexican society to a greater degree. A number of early Lakandon loan words are found with near identical phonological form in the neighbouring Mayan languages Tzeltal, Chol, and Tojolabal, loan words that because of their archaic form must have been borrowed at an early stage in the contact with Spanish speakers.<sup>16</sup>

It was only in the late 19<sup>th</sup> century that the lumber trade, and later the rubber-sappers, came into the region and crossed paths with the Lakandonnes. The discovery of the ruins of Bonampak in 1945 intensified these contacts. Since the 1950s there has been an increasing presence of foreigners and Mexicans in the areas traditionally inhabited by Lakandonnes of the Southern- and the Northern group. Much of the rainforest that covered almost the entire south-eastern parts of Chiapas in the 19<sup>th</sup> century has now been turned into pastures for grazing and only a very small part has been saved from the onslaught of settlements and subsequent deforestation, due in part by granting the Lakandonnes ownership of the area in 1972. A map of the region with the area of Lacanjá Chan Sayab circled, is presented below:

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<sup>16</sup> In an effort to collect loan words during the 2005 summer session with the PDLMA, only some 12-15 loanwords were found that are likely to have been borrowed before the turn of the 20<sup>th</sup> century. Examples of such words are: *wahrach* 'huarache', Eng. 'sandal'; *paanyaj* 'pañuelo', Eng. 'handkerchief'; *kohpar* 'ceremonia', [copal], Eng. 'incense'; *suhkar* 'azúcar', Eng. 'sugar'; *pohtej* 'vaso' [botella], Eng. 'bottle'; *naap'ax* 'navaja', Eng. 'pocketknife'; *pooxaj* 'bolsa', 'maleta', Eng. 'bag'. All loan words form this period display phonological adaptation to the phoneme inventory of Mayan languages (i.e. /b/ --> /p/; /l/ --> /r/ or /x/) and changes in stress pattern from the second to the first syllable. Later loans do not feature similar changes.



MAP 2. THE LACANDON FOREST AND SURROUNDING AREAS (FROM BAER & MERRIFIELD 1971)

The contemporary material culture of the Southern Lakandones has been thoroughly described in Baer & Merrifield (1971). Baer spent more than 40 years (ca. 1944-1990) living as a protestant missionary with the Lakandones and gathered valuable information on their everyday existence. He also made efforts to trace the history of their ancestors as far back as possible despite the lack of written records (see section 2.2.2, below). As expected, traditional religious activities are left out from his account but they had probably almost disappeared by the time of Baer's arrival in Lacanja anyway.

Another important account of a more anthropological nature is Boremanse (1998). Boremanse spent a long time in both the Najá region as well as in Lacanja in the 1970s and 1980s and he still visits Lacanja regularly. He has devoted a lot of time and effort to

describe, among other things, social, religious, and mythological concepts and structures through the interpretation and analysis of traditional stories and folk tales.

However, in the department of religion and myth, no one has done more than Roberto Bruce who although he produced a grammar of sorts, was a religious anthropologist at heart. Bruce spent more than half his life working with the Lakandon of Najá and he was also buried there. He published several works comparing the religious practices of present-day Lakandon in Najá to the ancient Maya traditions as they can be seen on mural paintings and in the inscriptions found in ancient Maya ruins. He believed that the Lakandon practice a form of religion that descended directly from the people that lived in the area during the first millennia AD (cf. Bruce 1968, Bruce, Robles & Chao 1971).

### **2.2.1 The Lakandon Maya way of life**

It would be arrogant and presumptuous to claim knowledge of even a small part of the complexities of every-day life in Lacanjá Chan Sayab', but a brief description of some general features of life as I have experienced them, and read about them, is perhaps useful to the reader, however superficial these observations may be.

The picture painted of the Lakandon is often that of "The Last Savages"; "The Remaining Descendants of the Ancient Maya Civilization"; and "The People from the Stone age", among other epithets. There is a necessity for labels and catch phrases in Western society and nothing can escape them. At the same time, such labels do very little justice to what they refer to.

While it is true that the Lakandon are descendants of Maya speakers that lived throughout the high- and low-lands of southern Mexico and a large part of Guatemala, Belize, and Honduras at the time when the Ancient Mayan cities and centres were built, this fact is also true for several other Maya speaking populations, including Yucatek and Cholan speakers. It is also true that some groups of Lakandon Maya speakers used tools such as flint axes and knives even into the 19<sup>th</sup> century because of their relative isolation and reluctance to interact with the surrounding population. However, they are not "savages", nor a "stone age people". They are descendants of a group of Yucatek speakers that moved away from areas of the Yucatan and/or present-day Guatemala in order to escape conflict with either Spanish invaders and/or other Maya speakers. The separation that followed this move has led to the retention/invention of some distinct

cultural traits that they either took with them or that they adopted as a result of their new living conditions.

Lakandones are first and foremost slash-and-burn agriculturalists that, because of the conditions of the biosphere that they have inhabited for centuries, also are proficient hunter-gatherers. There is no reason to think that the combination of these two activities is an invention; it is very likely that it was something the Lakandones brought with them from their "old" way of life, before they separated from other Yukatek speaking groups. However, the rainforest offers a rich variety of prey that certainly has increased the emphasis on hunting in every-day life for the Lakandones, traditionally.

Presently there are many restrictions to what can be hunted and when, because of the shrinking area of untouched rain forest and the consequential loss of species that can maintain viable populations.

#### 2.2.1.1 Farming

The climate in the lowland area surrounding Lacanjá allows for a wide variety of crops to be grown. Maize, which is the staple crop together with beans, can be sown at six times during the year, yielding up to three separate harvests, three times in the spring, two in the fall, and one during winter. The times for sowing maize are determined by the flowering of trees and vines rather than by calendrical notions or weather conditions (cf. Baer & Merrifield 1971).

Without going into detail, there are at least four kinds of maize, as many types of beans and several chilli pepper fruits. Also planted are sweet potatoes, yam beans, chayote, tomatoes, onions, papaya, mango, and pineapple. Several trees are kept to grow lemons, bananas, avocados, cacao, oranges, and plums. Traditionally, tobacco plants were also kept although fewer and fewer Lakandones reportedly plant them nowadays.

The way Lakandones farm is not very work-intensive which leaves a lot of time for relaxing and other non-agricultural activities. The cornfields are non-irrigated and only require weeding once the crops are sown. The average Lakandon who still prepares and sows his own cornfield has an impressive knowledge about such things as soil quality, the importance of certain wild plants and trees growing in the vicinity of the planned field, all of which are important to determine the success or failure of a year's crops.

My personal knowledge and experience of the techniques of farming are limited mainly because the people that I stayed with had very little planted during the time I

stayed with them. Since they were involved with tourist-related activities such as cabin letting and acting as jungle guides, they had very little time for working a cornfield. Corn and beans are bought from Tzeltal farmers or from other Lakandonos for a comparably low price. Many families also pay Tzeltal farmers to tend to their cornfields so that they can engage in the more lucrative activities connected to the tourist industry.

#### 2.2.1.2 Hunting and fishing

Hunting and fishing is also done seasonally although there is always *some* kind of prey to be found. From my own experience, the seasons are mostly discussed in terms of what type of animals, especially birds, are abundant at a particular time.

Peccary is a favourite type of game that is more or less easy to encounter depending on the availability of certain fruits. Also hunted (at least traditionally) are small deer and the larger white tailed deer. A traditional prey that is not hunted anymore, although it is abundant in stories about hunting, are the two kinds of monkey that live in the area: the howler monkey and the spider monkey. Jaguars and smaller relatives of the spotted jaguar are not permissible to hunt anymore, and are furthermore seldom seen except by their tracks.

Smaller game like opossum, coatis, moles, and several kinds of rodents are still hunted and eaten, although some are more appreciated than others. Traditionally, a variety of insects, reptiles, frogs, toads, turtles, and snails, were also collected but I have not heard of anyone eating such foodstuffs today.

The lakes and rivers around Lacanjá are filled with a wide variety of fish. Fishing trips and trips to collect crawfish are usually made over night. Younger speakers sometimes go on such trips several times a month, but in my experience they rarely return with many fish and the trips are not done in order to supply the household with food. Fish for consumption are instead cultivated in small ponds and are either sold or eaten by members of the household that own the fishpond.

### 2.2.2 Historical differences between Yukatekos and Lakandonos

The socio-cultural changes that Lakandon speakers have gone through historically when compared to the general Yukatek speaking population – if indeed it is possible to speak of such a “general” population – are difficult to evaluate, but there have been some decisive differences in their separate histories that are visible in the organisation of present-day Lakandon society.



Small bands of Yukatek speakers (i.e. “proto-Lakandon”) separated themselves from larger Yukatek-speaking communities to occupy – to them – foreign lands. The already small groups were decimated by diseases and conflict with outside influences as well as from within the group. The situation ultimately resulted in a “culture of avoidance” where families live in a hamlet-like organisation, often changing the location of their settlements for reasons of sustenance, but also in order to avoid others.

This scenario is in contrast to the situation other Yukatek speaking sub-populations found themselves in at the time of, and just after, the conquest. The Christianisation process and the reorganisation of Yukatek society took place after a period of war and conquest imposed by the Spaniards. The same methodology that was used to conquer and subdue other parts of New Spain (i.e. Colonial Mexico) was employed in the Yucatan. Franciscan friars and clergymen busied themselves with learning the Yukatek language in order to preach the gospel to the Yukatek “heathens”. City centres modelled on European ones were established and sacred sites dedicated to the old Gods were transformed to serve the purposes of the Christian church. Many groups of Yukatek speakers resisted Spanish rule and some areas of the Yucatan were not conquered until the 19<sup>th</sup> Century, but for other parts, Spanish rule was in place already by the end of the 16<sup>th</sup> Century.

The Spanish colonists took advantage of the social structures that were in place before their arrival, but transformed those structures so that the power lay with the Spanish elite, ensuring taxation of the indigenous population for their enrichment. This system may have meant small changes on the surface of things and a continued way of life for certain parts of the indigenous population, with one ruling class substituting another. However, Yukatek speakers were subjects of the Catholic Church and were required to attend services and to be baptised. Their names were entered into the records of the local church and all were given Catholic names to signal membership to mainstream society and the Church. Some were also subjected to rudimentary forms of schooling and learned to read and write. Official letters written in Yukatek Maya to Spanish authorities suggest this (cf. Restall & Sousa & Terraciano 2005). Bilingualism was, although not widespread, common in certain, mostly non-rural areas.

The male Lakandon speaker, on the other hand, had no master and no obligations towards anyone other than his own father and family. Community structures in the form of coordinated activities and celebrations were in part replaced by practices and agreements within the larger family/household. Religious practices were completely



determined by the agricultural cycle and the health situation of family members. Interactions with other groups of Lakandon speakers were brief and mainly directed towards obtaining one, or several wives. Traditionally, there was no literacy among the Lakandones and until the middle of the 20<sup>th</sup> century, almost zero bilingualism.

The cultural differences between the Maya speakers living in the Yucatan and the ones in Chiapas are clearly visible from their separate histories. However, there are also some distinct differences between groups of Lakandon Maya speakers, most clearly between the Northern and Southern groups.

### **2.2.3 Southern and Northern Lakandones**

Tozzer (1907) is, again, perhaps the first to state the differences between the Southern and the Northern Lakandones, especially with regard to physical appearance such as hairstyle and clothing. These differences are also apparent in many other ways not least in the way the two groups regard each other. They exaggerate the distance between the settlement areas Lacanjá and Najá, and they are quick to point out that people from “the other group” speak differently from themselves.

Boremanse (1998) identifies several traits that distinguish the Southern and Northern groups. Aside from the lexical differences in vocabulary and various preferences in clothing style, he notes that attitudes to conflict and psychological disposition is different and that character traits of a person that are valued by the Northern group are not looked upon in the same way by the Southerners, and vice versa. Boremanse consistently separates descriptions of the two groups because of their many distinct features.

While the Southern Lakandones have lived dispersed in the lowland jungle area bordered off by the Usumacinta river, encompassing the Lacanjá river up to the Lake Miramar, known as San Quintín, the Northern group have resided around Lake Najá and Metzabok, some 60 km from present day Lacanjá. It is obvious that the two groups have a different history and perhaps even different origins. Boremanse is of a similar opinion; “ [i]t seems likely that Northern and Southern Lacandon were already living in different areas of the Petén prior to their migration into Chiapas” (Boremanse 1998: 7).

The migration that Boremanse refers to is from a postulated origin around Lake Petén in Guatemala where the Itzaj resided both historically and presently. They are also speakers of a distinct Yukatekan language. The Itzaj were in pre-colonial times described as a fierce and warlike people that forced groups of Yukatek/Itzaj speakers to

flee from the region and resettle in other areas of the forest. It is to those groups of “refugees” that the ancestors of the present day Lakandones have been attributed.

In trying to determine the origin of the two groups, a comparative survey of, for example, names for plants and animals could reveal which other Maya speaking groups have had the most contact with Lakandones from the North or the South. It appears that only a small portion of such terms corresponds to the ones attested for Itzaj as they are listed in Hofling (1997). Itzaj has of course had a greater deal of influence from Spanish, which might go some way in explaining the differences.

Boremanse suggests that Yukatek speakers from the Petén region came into contact with small Chol speaking groups, adopted their cultural traits but held onto their language and even absorbed the groups already living there (Boremanse 1998: 4).

The actual origin of the present-day Lakandones needs more research, linguistic and historical, but attitudes emphasising the avoidance of foreigners and even of each other, point to a break from attitudes and practices that are prevalent in other Yukatek speaking communities and areas. The fact that the Lakandones managed to avoid Christianisation and assimilation into Mexican society hundreds of years longer than their indigenous neighbours is also in support of such a break. Even today, while having intense contact with outsiders in the form of tourists and other indigenous population, the Lakandones remain separated from their neighbours largely thanks to their land ownership that was established in 1972 by government decree.

Linguistically, it is not possible for me to estimate where Northern- and Southern Lakandon stand in terms of a dialect continuum with regard to one another. Since almost all the samples of speech I have of the Northern dialect are ones from speakers who have resided in the southern region for some time, that data may be disqualified for representing the northern dialect. My impression is, however, that the differences are fewer between the dialects than between either of the two dialects and any other Yukatekan language. This is a topic for further study.

#### **2.2.4 The history of MChKY's lineage**

Baer & Merrifield (1971) attempt to sketch the history of specific groups belonging to the southern dialect-speaking group from interviews with their descendants. Because of the lack of written records and time keeping devices such as notch sticks or knot strings, any definite dates to events are precarious to make. However, the authors maintain a certain degree of confidence by inference and triangulation, comparing stories and

relying on knowledge about general age attributes, e.g. how puberty relates to the earliest possible dates for a girl to bear children.

One of these sketches has special relevance since it involves relatives of persons that I have worked with throughout the investigation. The history of the family to which MChKY belongs is drawn in some detail, leading all the way back to 1880 when the great-grandfather of MChKY, Pancho K'iin (57)<sup>17</sup>, presumably was born.

Pancho K'iin had two wives, Naj Bor (169) and Ixam (113) and MChKY's grandfather Vicente Bor (123) was born in 1903 by Pancho and Ixam. He and his family lived in several locations between the Lacanjá and the Jataté rivers (see map 2, section 2.2) but resided mainly in the area of the Jataté until they in 1926 moved up to *säk ru7m* near Lake Miramar. Before this move, Naj Bor died in 1922, leaving Ixam, who died shortly thereafter.

This situation led Pancho and two of his male relatives (his son excluded) to raid another settlement for new wives, which they obtained. Similar raids, resulting in the death of a large number of Lakandon men, were common up until the 1940's when the scarcity of women no longer was a problem.

After having moved away from the area near Lake Miramar, the group including Pancho K'iin and his son Vicente resided in various parts along the Jataté and neighbouring areas. They eventually came back to *säk ru7m* where Vicente Bor took Naj Bor (111) as his first wife. In 1942 he also took her mother Juana Naj Bor (105) as his second wife after her husband had died from malaria.

Such an alliance may seem unusual but I have had reported to me that a man living in Lacanjá today has married a woman and her daughter from a previous marriage, who thereby has become the man's stepdaughter *and* wife. Although not common today, marriage practices along these lines have been almost the norm in the past when women were few compared to the number of men seeking wives, a practice that did little to alleviate the situation.

Vicente had two sons by Naj Bor (111), KYB and KYYM, who were born in 1943 and 1948 respectively. KYB is MChKY's late father and KYYM is his uncle. Following the death of their mother in the early 1950s, Gertrude Blom who was the wife of the Danish explorer Frans Blom, took KYB, KYYM, and the remaining family

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<sup>17</sup> The number in parenthesis corresponds to the number assigned to a person in the classification scheme that Baer & Merrifield use to keep track of all known and identified Lakandones (Baer & Merrifield 1971: 255-267).

to San Cristóbal de las Casas (SCLC). After a brief return to among other places, Najá, the family returned to SCLC where the two boys remained with Gertrude and Frans while their father went to Lacanjá to look for a new wife, which he eventually found. The two boys went to school in SCLC and remained with Gertrude and Frans for several years. KYB and KYYM both moved to Lacanjá after they reached maturity and MChKY was born in 1973 or 1974.

Encompassing almost a century, Baer & Merrifield's description of several lineages and families living throughout the large patch of rain forest that makes up the southern region of the Lakandon Forest, we get a picture of conflict, disease, strife, and alienation between members of the same speech community. Lakandones avoided others not only because of risk of disease but also from fear of attack and loss of life and wives. This picture is confirmed to a certain degree in the organisation of present-day Lacanjá.

It is for example understood by all Lakandones, that one does not visit another household without reason (unless they are close, older relatives), and certainly not when the husband of the household is away. Guests are not invited inside the house but remain on the patio and usually do not stay for long, but only linger for a short chat.

### **2.2.5 Present-day life in Lacanjá**

Despite the comparable wealth of descriptions on both the Southern and Northern Lakandones in various works, one cannot help but feel that some of the existing descriptions are poorly reflected in the everyday lives of the people one meets in present-day Lacanjá. A lot of effort has been devoted to describe something that is a very marginal part of everyday life. Religious practices are only present in the existence of a chapel church that a small group of people go to on Tuesdays and Sundays. The service is led by a Lakandon, Manuel Castellano, who has taken Philip Baer's place and it is conducted in Lakandon Maya. The ever increasing presence of tourists in some parts of Lacanjá has led to a shift away from traditional activities such as farming and hunting, to the transportation and accommodation of tourists and backpackers. The nearby location of the ruins of Bonampak is no doubt the most important factor in attracting tourists to the area.

This change in daily activity (for adult males) may seem like a disruption in the lives of the Lakandones but that is not necessarily the case, at least not in the short term. I get the impression that the Lakandones themselves view the presence of tourists as a

resource no different from certain animals that live in the forest. When Lakandonos talk about tourists they talk of them in the same way as they do with regard to forest animals. There is a season for tourists in the same way that there is a season for parrots. Neither is available all the time. Only one family has made deliberate efforts at attracting tourists to come to Lacanjá by working together with a local travel agency based in SCLC.

The men who have cars or mini buses drive to the place where tourists are rounded up for transportation to the ruins of Bonampak like they would go to their *milpa* (i.e. non-irrigated cornfield). It only involves less work for them. The hours are the same and the work away from – but within reach of – the household is also an old routine that they are accustomed to.

The changes that the presence of tourists brings are probably more long term and are hard to predict from a shorter perspective. Spanish has become absolutely essential for all members of the household, including the younger women. The command of Spanish as a second language is greatly improved by the state-run school that all children go to. Less and less time is spent on traditional male activities such as farming and hunting. Both activities are still maintained, especially by those who are marginally involved in the tourist trade, but they are not seen as desirable occupations by young men growing up.

Increased economic resources and a greater degree of familiarity with mainstream Mexican society means that the mobility of young men has increased and some of them go regularly to SCLC to spend time drinking and enjoying themselves. Trips to the more nearby Palenque are commonplace and most families have members that go at least once a week to buy things that they cannot get in neighbouring villages.

Storytelling and other orally transmitted traditions are clearly on the wane and only the older generation of ages 45 and upwards claim to know any. Satellite TV has replaced such past time diversions.

The political situation in southeastern Chiapas is complicated and unstable. Although the presence and influence of the Zapatistas in a military form is felt less and less, the conflicts over land rights and ecological preservation remain problematic issues that the Lakandonos find themselves in the middle of. I will not pretend to have a grasp of the rather complicated situation as it stands today and I refer the reader to the well-informed account by Trench (2002) on some of the politics of the region.

The Lakandonos who, by government decree, have become the rightful owners of the forest where they live are not well-liked by the surrounding indigenous population and they have become grouped together with government officials and rich landowners as the ones who are thought to cheat the remaining indigenous population of Chiapas out of what is rightfully theirs.

The Lakandonos living in Lacanjá Chan Sayab' *are* privileged when compared to the surrounding population in the area. They have access to land where they can grow their corn; they have income from the tourists that come to see the ruins of Bonampak and the surrounding jungle; and they have access to modern facilities like electricity and free health-care without having to go for several hours by car to Palenque. Moreover, the regional climate in the rain forest is much more agreeable than the surrounding areas that through deforestation have become hot and dust-ridden plains reserved for grazing cows and dirt-poor, small-scale farmers.

### ***2.3 Conditions and prerequisites for the investigation***

The contents of this thesis and the research that it has resulted from are conditioned by several different factors, among them my own person and the preparation that I have had before venturing into the ongoing investigation as it is detailed here. More importantly, it has also been shaped by the collaborators and participants that offered their attention and interest and who provided me with speech samples and explanations.

Accordingly, I think that a description of the external circumstances for the investigation is motivated, especially since the goals of the investigation are focussed on the semantics that arise from pragmatic motivations underlying the use of words and expressions used in time reference. No instance of language use is free from the specific situation where it occurs and a lot of effort has been spent on taking into account the specifics of a speech situation and how these relate to the interpretation of time words and temporal reference in a larger sense.

Therefore, I include a brief introduction of the persons whose utterances are found throughout this investigation.

#### **2.3.1 Participants and language consultants**

The participants of the present investigation and documentation project are briefly presented here as individuals with personal histories and lives, and not as anonymous speakers whose presence only can be seen through the words that I chose to include in

the investigation. I use abbreviations for the people with whom I have worked, or from whom I have recordings of speech. All others remain nameless.

#### 2.3.1.1 EChK

EChK is a speaker of the Northern Lakandon dialect and was one of my main consultants. He is around 50 years of age and is the head of the household where I chose to stay when I was in the field. He also has several relatives, including two brothers living in close proximity to his own house. According to tradition, EChK's two married sons live in separate houses adjacent to the main house where he lives with his wife ChN, his oldest daughter, who is unmarried with an 8-year-old daughter, and his 17-year-old unmarried son KY. Incidentally, he also has another daughter residing in close proximity to the home with her husband CC and their two children.

EChK is the oldest of four brothers and has a commanding, yet humble presence and a good disposition. He has helped me greatly by offering his time and attention to the goals that I have set for the project; goals that I tried my best to explain to him at the outset. EChK is illiterate and therefore felt that it would be best, initially, to bring his youngest son, KY, to work with me as well since he knows how to read and write. Although unnecessary from my point of view, this resulted in good circumstances for recording conversations and "assisted story telling" that I was grateful to include in the corpus.

EChK moved from Najá where he grew up and started a family with his wife ChN to Lacanjá some 20 years ago. Because of a feud of sorts between one of EChK's younger brothers and a family head in Najá, EChK's father decided that they should all pack up and go to Lacanjá to see if it was possible for them to live there instead. The whole clan was not asked to leave, but they decided to go as a group, exempting EChK's youngest brother who decided to stay and who lives in Najá to this day.

Although he lacks basic reading and writing skills, EChK has been trained as a doctor's assistant to administer shots and provide medical information to other community members, which he does when asked. He is also a skilled farmer and hunter although nowadays he spends most of his time accommodating tourists and backpackers who pass through Lacanjá on their way to see the ruins of Bonampak or en route to Guatemala and Tikal. During my stay in Lacanjá EChK bought most of the food we ate either from other Lakandones or went to the nearby Tzeltal village Palestina instead of growing enough staple foods in his own milpa. This is a common situation for those

community members who are involved in the tourist industry either as cabin-letters, or as drivers to-and-from Bonampak (see also section 2.2.1.1).

It is difficult for me to evaluate to what degree EChK, being a NL speaker, has been influenced by the SL dialect. I assume that he more or less still speaks NL, but he has no doubt adapted to the speech situation in Lacanjá by being sensitive to differences in vocabulary and idioms.

A younger speaker, GKY, told me in a recording that when he first came to Lacanjá, he felt very different from the people living there with regard to their vocabulary and pronunciation. He also stated that he adapted quite quickly to the situation. All speakers are quick to point out whether a word is from the SL or the NL dialect and their intuitions are usually confirmed by speakers of that dialect and in samples of recorded speech.

#### 2.3.1.2 KYYM

KYYM has a rather unique personal history in that he is well educated even though he belongs to the older generation of speakers. He is approximately 59 years old and was raised by Gertrude Blom at Na Bolom in San Cristóbal de las Casas during the 1950s and 1960s after his mother died (see section 2.2.2). After she passed away, his father brought him and his older brother KYB from San Quintín near Lake Miramar, where they lived at the time, to San Cristóbal to be cared for by Gertrude and Frans Blom. They sent him and his brother to school and made sure they received a proper education. Meanwhile, KYYM's father found a new wife and settled down in Lacanjá. When he was grown up, he went to live in Lacanjá where his brother also had settled down and started a family. KYYM then became in charge of a radio communications station in Lacanjá, keeping communications open with the regional capital Tuxtla Gutierrez and the colonial capital San Cristóbal de Las Casas. He has kept that post ever since although there is an ever-decreasing use for the radio station after the introduction of the satellite telephone.

After his brother died a premature death in a car accident, KYYM left his wife and moved in with his brother's wife CChNK and helped raise the children that she had had with his brother. This kind of arrangement is not an uncommon one historically for Southern Lakandonos and there are many examples of similar, unexpected alliances (section 2.2.2; cf. Boremanse 1998; Baer & Merrifield 1971).



KYYM has led an unusual life with many travels and encounters that are uncommon for the average Lakandon male. He regards San Cristóbal as his true home and frequently travels there. He has no “milpa” of his own as that is something he never learned how to work. KYYM has said several times that he still practices the old religion and he is actually one of the very few persons that will sing religious songs if asked. He is a great storyteller and has provided me with a lot of material that now is a part of my corpus of recorded speech. KYYM is a speaker of the southern dialect.

MChKY is the youngest son of KYB and CChNK and is consequently the nephew of KYYM. He is approximately 34 years old and has a wife and two daughters. MChKY is involved in the “xate” industry and works as a foreman when the truck arrives once a week to gather the palm leaves that the “xateros” have cut in the jungle. The “xate” plant is used as decoration in flower arrangements because of its durability after it has been cut off the stem of the plant. Aside from his duties in this regard, MChKY also has two cabins that he lets to backpackers and tourists. He also tends to a milpa that he has in the vicinity of his mother’s house.

MChKY has been a valuable contributor in my research on Lakandon and has helped me transcribe the stories and tales that I recorded from his uncle KYYM. He is patient and considerate and rarely loses his patience or concentration.

#### 2.3.1.3 CChKY

CChKY also has an unusual life history. He is around 60 years old and also originates in San Quintín (which makes him a SL speaker) but has moved around, even outside of the Lakandon forest. The reasons for his travels are reportedly conflicts even involving murder, which as stated above was not uncommon only a little over a half century ago (see section 2.2.3). His parents died when he was very young and he was raised by his uncle and other relatives. Although he was an angry man in his youth, he has long since settled down and has even given up drinking, which reportedly was something he used to have serious problems with.

CChKY is regarded by some Lakandones to be a sorcerer, or a shape-shifter of sorts, and I have been told that he can turn into a jaguar at will but that he has stopped doing so since long ago. He currently works for an environmental organisation in the area surveying the forest making sure that trees are not cut down and that “squatters” (i.e. Tzeltal farmers in search of farm land) are prohibited from settling down within the boundaries of the forest.

CChKY is a great storyteller but is less keen on helping in the transcription-translation of texts. I have had help from his son, CChKY Jr, with such work. Sadly, CChKY Jr has not been available for the documentation project since he works most days as a guide in Bonampak. He is a gifted young man who I regret not having worked with very much because of his other commitments.

### **2.3.2 Language documentation: methods and goals**

As a PhD-student on the Endangered Languages Academic Programme at SOAS in London, I have been introduced to language documentation as a sub-discipline of linguistics and my description of Lakandon Maya in the present investigation has been guided by the goals and methods that define documentation practices. Although some researchers consider language documentation to be no different from language description, there is a growing consensus to regard language documentation as a separate branch of linguistics because of the implications it has for the description of endangered and under-described languages spoken in all areas of the world (e.g. Austin 2003, 2004, 2005).

Himmelmann (1998) states the basic goals and attitudes connected with documentation practice. The most important features of which are: *transparency, ongoing-ness, collaboration with speakers, ethics, and archiving theory*. A description of a language in a documentation setting has to be transparent in the sense that the materials that it is based on must be available to other researchers as well as to the speakers of the language. A documentation grammar is based on and accompanied by a corpus of annotated texts that preferably should be balanced in what it represents with regard to speakers and speech genres. In a documentation setting, it is not feasible to go into the field with a questionnaire and fill in the blanks. A grammatical description must be based on samples of spoken language with elicitation strategies as a secondary, complementary method for obtaining language data.

A documentation must also be ongoing and open to the addition of materials by later researchers. One researcher cannot claim the rights to describing a language, keeping others at arms length from his collected materials. Collaboration is also encouraged across disciplines with a team-based approach including anthropologists, ecologists, and filmmakers in addition to one or more linguists. The collaboration aspect is not reflected in the present documentation since I have been alone in working on Lakandon, so far. The gathered materials must be structured in such a way that other

researchers may add both new materials and analysis to keep it from becoming isolated and idiosyncratically structured.

The ethical standards of language documentation include considerations of intellectual property rights and forms of interaction with speakers, opting to make them participants of the documentation rather than resources at the linguist's disposal. Speakers are in charge of the materials that are collected in the documentation process and are decision makers when it comes to access to archived materials.

Archiving is essential to several other goals and issues that constitute good documentation practice. Without a well-defined archiving process, transparency, ongoing-ness, and ownership and intellectual property rights are all impossible to achieve since they depend on the archiving to be realised. Archiving is much more than cataloguing and storing data. It must meet several requirements that allow the materials to be accessible independent of any one researcher, durable beyond the lifetime of one researcher, and accessible by means of annotation to persons without any prior knowledge of the language.

All aspects of language documentation listed above have had an impact on how I have conducted my research to date. The materials that the grammatical description is based on are archived with the Endangered Languages Archive (ELAR) in London, and the speakers themselves have determined the level of access to specific language materials. I have based my analysis on how grammatical phenomena are represented in texts and I have tried my best to involve the speakers as active participants in the documentation process and explain what objectives I had from the outset.

I regard the documentation that has made the present investigation possible as "basic" in the sense that it fails to account for many aspects of language use and some areas of grammatical structure that should be part of a more complete documentation. It is my intention, however, to continue with the documentation of Lakandon Maya to fill in these gaps by an intensified collaboration with the speakers of Lakandon, eventually making them the primary documenters of their own language.

### **2.3.3 Setting for the documentation**

For my own part, three persons have had decisive influence over the course of my research on Lakandon so far. Una Canger recommended me for Terry Kaufman's dictionary project, the PDLMA, in addition to giving me access to her own material on Lakandon. Terry offered me a place on the project to work on Lakandon, took me

onboard, and helped me gain some understanding of what a Mayan language is. Finally, Peter Austin, director of the Endangered Languages Academic Programme (ELAP), gave me the support needed to continue with a proper documentation of Lakandon out of SOAS in London.

Chronologically, I started with one summer of dictionary work for Terry on the PDLMA in 2003 before I was accepted as a PhD candidate on the ELAP. The next period of fieldwork was conducted on my own in the fall of 2004 for three months and in the spring of 2005 for an additional three months. The summer of 2005 was my second summer on the PDLMA project, which leaves me a final summer to be completed in 2007.

All in all, I have so far spent close to a year working with speakers of the language and an additional two years working on the language on my own, working out its structure on the levels of morpho-syntax and pragmatic language-in-use.

The most important kind of influence has come from the speakers of Lakandon that I have had a working relationship with, on and off, for more than three years. During my stays in the field I have mostly lived in Lacanjá Chan Sayab, which is the main settlement for speakers of the southern dialect. I have visited the northern settlement of Najá, but I only remained there for a few days.

While in Lacanjá, I have mostly lived with EChK in an area called “Nuevo Najá” where several families from Najá moved in the 1980’s due to personal conflicts there. They have established themselves, with the approval of the “original” inhabitants of Lacanjá, in a separate area from the rest of the settlement although within close range from central areas where the school, infirmary, and church are located (see also section 2.3.1.1).

I have at the same time worked with speakers from other areas of Lacanjá even though I have not resided with them. Either they came to visit me where I had established a working place, or I went to visit them in their houses to work there. I realised quickly that I would not be aided in making new acquaintances within the settlement just from having developed a working relationship with one speaker. There is reluctance to move around the area outside of ones own settlement without having any business to that place. Apparently, introducing me to other potential collaborators was regarded as too weak a reason for such a venture. I was on my own when it came to contacting speakers that were willing to work with me as language consultants. In total, I have worked with eleven speakers of ages varying from 15 to 60 years of age. They

are, as stated above, anonymous and I have abbreviated forms of their names that I use to refer to them throughout the investigation.

## **2.4 A grammatical sketch of Lakandon Maya**

This section accounts for some basic grammatical features of Lakandon Maya. I have had no reason to question the already established lexical categorisation of Yukatekan languages and of Mayan languages in general, as proposed by Kaufman (1990, 1991), which means that the present description adheres to that classification. Andrew Hofling's documentation of Itzaj Maya (Hofling 1991, 1997, 2000) also uses a similar classification scheme, which facilitates a comparison across the Yukatekan languages. There are advantages to achieving a certain degree of consensus between work on closely related languages. In addition, the amount of effort and the excellent quality of the previous work by Kaufman and Hofling means that disagreeing with their conclusions must be well motivated indeed.

The *root classes* of Yukatek that Kaufman proposes according to morpho-phonological criteria are: 1) transitive roots, 2) intransitive roots, 3) positional roots, 4) affective (verb) roots, 5) nouns, 6) adjectives, 7) numerals, and 8) particles (Kaufman 1991: 118). All root classes take inflection and stress, except for particles. The particle class is therefore defined negatively.

The following subsections are divided according to the lexical categorisation of Yukatek and provide some information, with examples, on the morphology and syntax of the class members; firstly, 2.4.1 presents information on phonology and higher-order syntactic phenomena such as word order, topicalisation, focus, and negation; 2.4.2 describes nouns and adjectives, and 2.4.3 treats transitive-, intransitive-, positional-, and affective verb roots.

The particle word class is introduced in chapter 4 since it is of special interest to the description of the time words that are investigated in chapter 5. Also left for chapter 4 is a more thorough description of the system for aspect-mood and status inflection. This delay of presentation reflects the special relevance this system has for time reference.

## 2.4.1 Phonology and syntax

### 2.4.1.1 Phonology and orthography

There are few surprises in the phoneme inventory of Lakandon Maya when compared to the other Yukatekan languages. The complete set of consonants is presented in table 2.1 and the vowels are in table 2.2, using IPA symbols and the corresponding orthographic symbol in parenthesis when the two differ.

Consonants	Labial	Alveolar	Post-alveolar	Velar	Glottal
<i>Stops</i>					
Voiceless	p	t		k	ʔ (7)
Voiceless glottalised	p'	t'		k'	
Voiced glottalised	ɓ (b')				
Affricates		ts (tz)	tʃ (ch)		
Affricates glottalised		ts' (tz')	tʃ' (ch')		
<i>Fricatives</i>					
Voiceless		s	ʃ (x)		h (j)
<i>Nasals</i>					
	m	n			
<i>Liquids</i>					
		l, r (r)			
<i>Glides</i>					
	w		y		

TABLE 2.1 LAKANDON MAYA CONSONANT INVENTORY.

Vowels	Front	Central	Back
High	i		u
Mid	ɛ (e)	ə (ä)	ɔ (o)
Low			ɑ (a)

TABLE 2.2 LAKANDON MAYA VOWEL INVENTORY.

The orthographic convention follows the one used by the PDLMA project (see section 2.3.3). It was originally developed by Terry Kaufman under the PLFM (Proyecto Lingüístico Francisco Marroquín) in the early 1970's and only uses ASCII symbols. It is almost identical to the practical orthography proposed by the Guatemalan Academy of Mayan Languages, which builds on the former orthography. The few exceptions being /7/ for the glottal stop and /Vh/ for high tone.

All vowels except /ä/ (mid, central) are also subject to long (neutral) and high tone contrasts, indicated by /VV/ and /Vh/, respectively. Given that there are six vowels, but only five that come in three variations, there are sixteen vowel contrasts available in Lakandon Maya. The two-way tonal contrast is also found in Yukatek and has been preserved at least in Southern Lakandon<sup>18</sup>. However, Lakandon also features the added vowel that is attested for Itzaj, which has lost the tones, thus placing the system in between these two related languages.

Tone is only present on long vowels in Yukatek and Lakandon because of the origin of tone in Yukatek which was a pre-consonantal /H/<sup>19</sup> (cf. Kaufman 1991). Short vowels are thus tone-less and tones do not apply to the sixth, schwa-like vowel, /ä/.

In Itzaj and in Lakandon, /ä/ corresponds to (short) /a/ in Yukatek. There is, however, a difference between Itzaj and Lakandon with regard to how the presence of /ä/ should be understood within the separate systems. Since Itzaj has lost its tones, the difference between /ä/ and /a/ is one that corresponds to a difference between short /a/ and long /aa/ in Yukatek. The long vowel, /aa/, in Itzaj is cognate to the long vowel with a high tone, /ah/, in Yukatek (Kaufman p.c.; Hofling 2000).

Lakandon has, as stated, preserved the tonal contrast so the systematic correspondences between Itzaj and Yukatek in the above regard can therefore not be transferred to Lakandon. The presence of /ä/ suggests that there is no place for /a/ within the vowel inventory of Lakandon since /a/ should have been replaced by /ä/ given that /aa/ blocks the need for a short substitute since the contrast between /aa/ and /ah/ still exists in Lakandon. Despite this situation /a/ is frequently attested and interchangeably occurs with /ä/ in a variety of phonological environments suggesting that the presence of /ä/ in Lakandon is in free variation with /a/.

The basic syllable structure for a lexical root in Mayan languages is CVC(VC). This is also the case for Lakandon Maya. The pervasiveness of the CVC root means that a basic root-dictionary can be compiled just from combining the existing phoneme

<sup>18</sup> It is my understanding that the tonal system has been preserved equally in Northern Lakandon, but since all the speakers of that dialect that I have worked with are (long since) residents in the area where Southern Lakandon is traditionally spoken, the presence of tone in their dialect could be contact induced. "The Lakandon Cultural Heritage Project" funded by the Volkswagen Stiftung (see section 2.1.2) has not reported any presence of tone in Northern Lakandon as it is spoken in Najá, but they have not devoted any discussions in argument of its absence either. The question whether tone is present in both dialects or not, is therefore pending future research.

<sup>19</sup> /H/ stands for both the (voiceless) glottal fricative, [h], and the voiceless pharyngeal fricative, [x], which were separate phonemes in Colonial Yukatek, but which are fused into one phoneme in modern Yukatek.

inventory of the language with all its possible combinations within the CVC matrix. Even so, not all combinations of consonants and vowels are attested. The syllable structure of Yukatekan prefixes is minimally a single consonant, C-, but the minimal prefix allowed to attach directly to the root is VC-. Suffixes are -(C)VC and are more numerous than prefixes.

There is, as suggested by the enumeration of the root classes above, a strong formal separation between transitive and intransitive verb-roots both with regard to phonology and morphology. One striking feature in this regard concerns the vowel quality of the root; e.g. the majority of all transitive roots have short vowels while intransitive roots have long vowels with either a high or a low (i.e. neutral) tone. For verbs, different sets of affixes are specific to the status of the root but derivation is also done by phonological operations. Examples of this are valence-changing derivations such as passivisation by lengthening of the vowel and insertion of a high tone (/Vh/) in the root (*k-u-b'uj-ik* – ‘he chops it (with an axe)’ → *k-u-b'uhj-ur* – ‘it was chopped’), or lengthening of vowels to form anti-passives (*k-u-b'uj-ik* → *k-u-b'uuj* – ‘he (axe-)chops (things)’).

There are a number of morpho-phonological processes that affect the realisation of utterances. The most important ones are, phrase-final devoicing, deletion resulting from contraction (*k-uy-a7r-aj ti7* --> *k-(u)y-a7(r)-(a)j ti7* ‘he said to him’), and lenition in order to avoid same consonant clusters (*k-k* → *j-k*). For a more complete account of common phonological processes in Yukatekan languages, I refer the reader to Hofling (2000).

#### 2.4.1.2 Basic word order

Lakandon has a basic VOS word order, which also is the case for Yukatek. However, examples of sentences with two full arguments are rare in my corpus of texts. One of the few can be seen in example (2.1). Often, when both arguments are represented in a phrase, the subject is fronted to occupy either a topicalised or a focused position, yielding a marked SVO word order (section 3.4.1.2).

More commonly, when one of the referents is known or already mentioned in the previous discourse, it is only marked on the verb by a cross-referencing person marker, as in example (2.2). Below are examples of the basic VOS word order with different constituents being either present or absent in the form of full arguments as indicated by parenthesis:



(2.1) *t-u-kuch(-aj)-o7b'* *in-b'a7tak* *tzimin*  
 COM-3SG.A-carry(-CP)-3PL.B 1SG.A-things horse  
 V O S  
 'The horse carried my things'  
 [HB050225\_1KYYM 3]

(2.2) *t-u-b' eet-aj-Ø* *u-7eskahla*  
 COM-3SG.A-make-CP-3SG.B 3SG.A-turn(Sp.)  
 (S) V O  
 'He made a turn'  
 [HB050328\_1KYYM]

(2.3) *y-a7r-aj-Ø silvehrio teen*  
 3SG.A-say-CP-3SG.B PN 1SG.IND  
 V (O) S IO  
 'Silverio told me (it).'  
 [HB050328 1KYYM]

### 2.4.1.3 Topicalisation

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is on the other hand signalled by *-o7* (regardless of the presence of any deictic particles), whereas *-e7* is an anaphoric discourse marker.

In the following examples (2.4-2.6), these three terminal deictics are utilized to form topicalised expressions.

- (2.4) *b'axik 7a-je7 7uhch-a7 t-uy-a7r-aj-Ø mahk-o7b'*  
 like.this DET-OST before-TD.PROX COM-3SG.A-say-CP-3SG.B people-PL  
 'That's what it was like before, the people said.'  
 [de los dioses UCLAK]

- (2.5) *7a-in-na7-o7 (t)u-kän-aj-Ø se7m*  
 DET-1SG.A-mother-TD.DIST COM-3SG.A-pick.up-CP-3SG.B cough  
 'My mother, she got a cough'  
 [cuando murio\* mi mama\* UCLAK]

- (2.6) *k-u-taar ki7 chan 7a-uhch-e7 k-u-tz'ook-s-a7r*  
 INC-3SG.A-come good little DET-before-TD.ANA INC-3SG.A-celebrate-CAUS-CPASS  
 'When the mature cob came, it was celebrated.'  
 [de los dioses UCLAK]

#### 2.4.1.4 Contrastive focus

Contrastive focus, i.e. the syntactic dislocation of a referent to achieve a discourse emphasis, also occupies the front of the clause, but it makes no use of the prefixes and suffixes found in topicalised constructions. Generally, this position is occupied by independent pronouns referring to a previously introduced actor in a story or a narrative.

- (2.7) *raji7 räk=b'o7t-ej-Ø 7u-aviohn-in 7in-b'eer*  
 3.IND all=pay-AF.CP-3SG.B 3SG.A-airplane-POSS 1SG.A-way  
 'It was he who paid for my fare'  
 [HB050328\_1KYYM]

- (2.8) *raji7 k-inw-a7r-ik-Ø k'uj-ir*  
 3.IND INC-1SG.A-say-PLN-3SG.B god-POSS  
 'I say it is he who is God'  
 [de los dioses UCLAK]

Topicalised and focused expressions can be combined and when they are then the topicalised expression is prepositioned to the focused one:

- (2.9) *7a-uhch-o7*      *teen*      *chichn-een*      *ka7*   *b'in-een*  
 DET-before-TD.DIST   1.SG.IND   little-1SG.B   when   go-1SG.B  
 TOP                      FOC           Predicate  
 'At that time, me, I was little when I left'  
 [cuando murio\* mi mama\* UCLAK]

#### 2.4.1.5 Interrogation and negation

The interrogative particle, *wa*, is placed directly after the verb, occupying the position of particles in general. *Wa* functions as a dubitative marker (2.10) alongside its function as a marker of yes/no questions (2.11).

- (2.10) *ma7 wa ich k'ahk'.naab'-i7*  
 NEG1 Q      LOC      sea-TD.LOC  
 'I don't think it was in the sea (that he was dumped)'  
 [HB050211\_3KYYM\_2]

- (2.11) *aw-ir-een wa jo7raj ich tu7 k-u-ko7n-an b'a7ar*  
 2SG.A-see-1SG.B   Q   yesterday LOC   where INC-3SG.A-buy.CPASS-PLN.IV   things  
 'Did you see me in the market yesterday?' (lit. Did you see me yesterday in the place where things are bought?)  
 [ALIM questionnaire MChKY: e-0371]

In wh-questions, *wa* is not used because of the presence of words such as *tu7* - 'where?', *b'a7kir* - 'which?', *b'ik'iin* - 'when'. It also appears possible to use rising intonation to signal questions in certain situations. I have not found evidence for a change in word order in either construction.

#### 2.4.1.6 Negation

There are three negation markers: 1) *ma7*, 2) *mix*, and 3) *mana7*. The sentence negator *ma7* has the widest range of uses. Both *mix* and *mana7* are specific variants of *ma7*. A distinct separation between *ma7* and the second negation marker *mix* is not clear to me in all instances but I have formed a tentative hypothesis regarding the functions of *mix* which in part is influenced by Hofling's findings for Itzaj (2000: 440).

*Mix* commonly modifies nouns and particles to make up fixed negated expressions like *mix b'ik'iin* ('never', lit. 'NEG which-day'), *mix mahk* ('no one', lit. 'NEG someone'), and *mix b'a7kir* ('nothing', lit. 'NEG thing'). This suggests a more restricted scope of *mix* compared to *ma7*, which commonly ranges over an entire

sentence. Such a restriction implies that the negative terminal marker *-i7* would not be used with *mix*, as it is with *ma7* to indicate the scope of negation, but that does not appear to be the case; if the context requires it, the terminal marker is present with *mix* as well (2.12).

One use of *ma7* and *mix* that also is observed by Hofling for Itzaj is in comparative constructions like ‘neither...nor’. This use is exemplified below in (2.12):

- (2.12) *teen*      *räk=päk'-ik-Ø*                      *kij*  
 1SG.IND all=sow-AF.PLN-3SG.B              QUOT  
 ‘It was I who sowed it, he said’
- ma7* *ti7ar* *päk'-ik-Ø-i7*                      *kij*  
 NEG1 child sow-AF.PLN-3SG.B-SCOPE QUOT
- mix*      *a-ti7ar*      *k-u-räk=päk'-ik-Ø-i7*                      *kij*  
 NEG2      2SG.A-child INC-3SG.A-all=sow-PLN-3SG.B-SCOPE QUOT  
 ‘The children did not sow it, he said. Nor did your children sow it, he said.’
- in-päk'-ar-e7*                      *b'a7 b'i(h)n in-jaan-t-ej-Ø*  
 1SG.A-sow-PLN.IV-TD.ANA thing FUT1      1SG.A-eat-TR-DEP-3SG.B  
 ‘I sow what I am going to eat’  
 [HB050211\_2KYYM\_2]

This use has a referential function, which appears to be reserved for *mix*.

The third negative marker, *mana7*, is a fused form consisting of *ma7* and the existential stative verb *yaan*, resulting in the existential negative expression *mana7* (‘there is none’). The phonological path of change that the expression has taken to its present form is suggested by what the expression looks like in Itzaj. There it is *ma7an*, from *ma7=yaan*. A metathesis where the glottal stop trades places with *-an* and where *-an* becomes *-na*, would produce the expression as it is pronounced in Lakandon today.

Since *yaan* refers to both *general existence* and *existence in a location*, this two-fold meaning is reflected in the use of *mana7*. The latter shade of meaning with regard to existence in a location is exemplified in (2.13) and the general existence meaning is in (2.14)

- (2.13) *tu7 yaan ti7*                      *wa yaan a-k'iin-e7*  
 where EXIST      SP.INDEF      Q      EXIST      DET-PN-TD.ANA

*k-(u)y-a7r-a7 ti7 mana7 kij*  
 INC-3SG.A-say-MPASS PREP NEG.EXIST QUOT  
 ‘Where is he? Is K’in here? They were told, he is not here, he said.’

*mana7 k'iin a-k'iin mana7 k'iin*  
 NEG.EXIST PN DET-PN NEG.EXIST PN  
 ‘K’in was not there. As for K’in, there was no K’in there (in the jail cell).’

[HB050211\_1KYYM\_1]

(2.14) *chuk(-ej)-Ø inw-äräk' tz'uhno7 kij*  
 grab(-IMP)-3SG.B 1SG.A-CL.pet humming.bird QUOT  
 ‘Get me a colibri, he said’

*tus mahn u-chuk(-ik)-Ø ti7 b'in*  
 lie happen 3SG.A-grab(-PLN)-3SG.B PREP go

*y-u7b'-ik-Ø ik-nuuk-ir*  
 3SG.A-listen-PLN-3SG.A 1PL.A-great-POSS  
 ‘The ancestor didn’t manage to catch one for him when he heard it’

*mana7 kij b'in-i k'iin y-a7r-aj-Ø ik-nuuk-ir*  
 NEG.EXIST QUOT go-CP.IV sun 3SG.A-say-CP-3SG.B 1PL.A-great-POSS  
 ‘There are none, he said. It is late, the ancestor said.’

[HB050211\_2\_2KYYM]

Possessive constructions are formed using *yaan*, which result in the typologically common ‘something exists to me’-construction, meaning, ‘I have something’. *mana7* is as a consequence also used to indicate a person’s lack of ownership as in (2.15):

(2.15) *mana7 inw-äräk' peek'*  
 NEG.EXIST 1SG.A-CL.pet dog  
 ‘I don’t have a dog. (lit. there is no my dog)’

[ALIM questionnaire MChKY: e-0133]

## 2.4.2 Nouns, numerals, and adjectives

### 2.4.2.1 Classification of nouns

Nouns are distinguished from verbs by being unavailable for inflection of status-aspect-mood and by being open to possession. But like verbs, nouns can also function as predicates and are therefore open to inflection for person, number and a variety of derivational operators that allow them to extend their function to being verbal predicates.

There is a large group of “active verbal nouns” (avn) that are both verb- and noun-like and as such, are un-derived in either function, i.e. they have the same form in both contexts (Kaufman 1991: 123). Examples of such verbal nouns are *tz'ihb'* (‘(to) write’, ‘writing’) and *yuhm* (‘(to) swing’, ‘swinging’). These constitute a root class of their own (Kaufman 1991) but could be mentioned in the description of both nouns and verbs. The avns are derived into transitive verbs by the transitivizer *-t-*.

The classification of noun roots can be done from both morpho-syllabic and semantic criteria. Hofling divides nouns into some 40 classes in his Itzaj dictionary (Hofling 1997) on both grounds. I have not arrived at a comparable level of categorisation for Lakandon Maya due to a less extensive investigation of its lexicon.

An important difference, however, between Itzaj and Lakandon is that the latter has lost its classification of nouns by the two prefixes *aj-* and *ix-* into something that resembles a gender distinction between masculine and feminine (cf. Hofling 2000: 93pp). There are traces of this system in the names for certain plants and animals in NL but it is not possible to attach either prefix on nouns that occur without them. Itzaj also appears to have a rather weak distinction between alienable and inalienable nouns. Alienability is an important parameter for possession in Lakandon Maya. A discussion on nominal classifiers is postponed until the following section 2.4.2.2.

Canger (1970b) tentatively classifies nouns from her data on Southern Lakandon into six categories on formal (morphological) grounds: 1) bare nouns that occur as roots: *b'u7r* - ‘bean(s)’, 2) nouns with the prefix *(i)x-*: *(i)x-kiik* - ‘woman’, 3) reduplicated nouns: *tsu-tsuy* - ‘dove’, 4) inalienable nouns occurring with a possessive prefix: *inw-ook* - ‘my foot’, 5) nouns with prefix and suffix: *u-k'i7k'-er*, and 6) nouns with some non-productive suffix: *ruk-um* - ‘earth worm’. Canger’s classification identifies three possessive constructions (1, 4, and 5) and another three forms that are independent of possession strategies (2, 3, and 6).

Bricker lists ten inflectional classes for possession in Yukatek (Bricker et al. 1998: 360). In them she differentiates between *ownership-*, *associative-* and *inalienable possession*. Bricker’s inflectional classes for nouns are, however, not the same as a classification of nouns since a noun can belong to more than one inflectional class. There is a clear separation between alienable and inalienable nouns in Yukatek, but this separation is not reflected by their inflection since some inalienable nouns take the *-er* suffix, labelled “inalienable possession” while others do not. One also has to

differentiate between alienable (2.16) and inalienable nouns (2.17) that do not take suffixes.

- (2.16) *bu7r*  
bean  
'bean'

- (2.17) *inw-ook*  
1SG.A-foot  
'my foot'

"Associative possession" (Bricker's class 3) indicated by the suffix *-ir*, is a construction open to all alienable nouns in Lakandon Maya and cannot be considered a classificatory tool there; it simply represents an available possessive construction.

- (2.18) *u-yuuk-ir*            *k'ahx*  
3SG.A-deer-POSS forest  
'Deers of the forest'/Forest-dwelling deers'

Inalienable possession indicated by the *-er* suffix is also an available construction in Lakandon although not as common as the one with the *-ir* suffix for semantic reasons. It appears as a suffix with a classificatory function at first, but in some constructions it is revealed to simply be one possessive suffix among others, albeit a less common one. One could consider it to be a *part-of* suffix that indicates inseparability between the object and the entity it belongs to.

In Yukatek, the word for blood, *k'i7k* is listed as a class 1 noun, i.e. one that does not take a suffix when possessed. There is a semantic difference in the presence of the *-er* suffix that pertains to inalienability: *u-k'i7k'-er* means 'his blood (flowing through his veins)' while *u-k'i7k'* means 'his blood (that he bought or got from someone else)'.

This distinction is lost in Lakandon. If one is talking about 'blood' regardless of its owner or the circumstances for its acquisition, the *-er* suffix is always present. Moreover, if *k'i7k'* is possessed without the *-er* suffix, it means 'rubber (sap)', or 'slingshot' (i.e. tree sap from the rubber tree). The word for blood in Lakandon appears inalienable on a lexical level. Compare (2.19) with (2.20):

- (2.19) *in-k'i7k'-er*  
 1SG.A-blood-IA.POSS  
 'my blood'

- (2.20) *t-u-man-aj-Ø*                      *u-k'i7k'-er*                      *Juan*  
 COM-3SG.A-buy-CP-3SG.B    3SG.A-blood-IA.POSS    PN  
 'John buys blood'  
 [exx 2.18-2.20; 060909 EChKY]

Alienable nouns like *b'äk'* ('meat', 'flesh') can also take the *-er* suffix in constructions that refer to a person's own flesh or other metaphorical part-of uses of the word as seen in (2.21):

- (2.21)a *yaan in-b'äk'-er*  
 EXIST    1SG.A-flesh-IA.POSS  
 'I have flesh (on my body)'
- b *u-b'äk'-er in-k'äb'*  
 3SG.A-flesh-IA.POSS    1SG.A-hand  
 'The flesh of my hand'
- c *u-b'äk'-er kib'*  
 3SG.A-flesh-IA.POSS    candle/flashlight  
 'Batteries'

Other inflectional classes listed by Bricker for Yukatek include nouns that undergo phonological change, either going from a (long vowel) high tone to a low, or a short vowel becoming long with a low tone. Both inflections are attested for Lakandon Maya:

- (2.22)a *k'ahn*  
 hammock  
 'hammock'
- b *in-k'aan*  
 1SG.A-hammock  
 'my hammock'
- (2.23)a *inw-äräk' käy*  
 1SG.A-CL.pet    fish  
 'my fish (from my tank)'



b *in-kaay*  
 1SG.A-fish  
 ‘my fish (that I caught)’  
 [exx 2.21-2.23; 060909 EChKY]

(2.23a) is an example of the last inflectional class listed by Bricker where a nominal classifier (“specifier”; Bricker et al. (1998)) is included in a possessive construction. Classifiers are obligatory for some nouns in NL but appear to be less so in SL and can be used with a variety of nouns depending on what their relationship is to the speaker or some other person. Classifiers of nouns and numerals are described below in sections 2.4.2.2 and 2.4.2.3.

In sum, it appears that processes of possession are poor tool for sub-categorising nouns in Lakandon since they represent derivational processes that are available to most nouns. Even a suffix like *-er* which appeared to be a suffix reserved for inalienable nouns referring to body parts, has a derivational function available to alienable nouns as well.

#### 2.4.2.2 Noun classifiers

Compared to Itzaj, the noun classifiers found in Lakandon belong to a quite different system. In Itzaj, most animate nouns such as plants, animals and people are classified according to “gender” by affixing either the *aj-* (masculine) or *ix-* (feminine) classifiers (Hofling 2000: 93pp).

In NL the gender prefixes are present on the names of some animals but they are not perceived as indicating masculine or feminine qualities. The *aj-* prefix is not attached to the noun, but is absent when quantified or classified by one of the other available noun classifiers described in (2.24) below. There, the noun *ajkacho*<sup>7</sup>, meaning ‘parrot’ appears without the *aj-* prefix when it is classified as the prey of a person (2.24a). In (2.24b) the noun for ‘parrot’ is quantified and again appears without the prefix that is present in (2.24c).

The noun is also quantified in (2.24c) by means of numerals, but that expression refers to a defined group of parrots which means that the *aj-* prefix in Lakandon Maya signals definiteness on the nouns that occur with them, which is something that also goes for the classifiers that allow possession.

(2.24)a *tahn in-mahn in-käx-t-ej-Ø in-juhr kacho7*  
 DUR 1SG.A-pass 1SG.A-look.for-TR-DEP-3SG.B 1SG.A-CL.prey parrot  
 'I was looking to kill parrots'

[...]

b *b'aje7 ich naja7 jach pihm kacho7*  
 now LOC TN very many parrot  
 'there are a lot of parrots in Najá'

[...]

c *t-in-jur-aj-Ø jun-tuhr winik aj-kacho7*  
 COM-1SG.A-hunt-CP-3SG.B one-CL.AN person DEF-parrot  
 'I killed some twenty parrots'

[HB040917\_1EChK\_6]

It is not clear if the *aj-* prefix plays the same role in SL, but it is present on far fewer nouns and may therefore be a more archaic form in that dialect.

Two of the noun classifiers found in Lakandon Maya that are retained from Yukatek are *7o7ch* -> *7oj* ('edible'), and *7äräk'* -> *7äräj* ('domesticated, pet'). A third classifier has been added in *juhr* -> *juj* ('prey, game').

These three forms are not classifiers in the sense that nouns in general are divided into either category. Nor are they obligatory with nouns. Rather they classify the relationship between an animate object and the speaker and thereby makes possible possessive constructions which otherwise would be ungrammatical. This also makes pluralisation possible with nouns that otherwise would be unspecified for number such as *peek'* ('dog'; see section 2.4.2.5).

(2.25) *in-juj kacho7*  
 1SG.A-CL.prey parrot  
 'My parrot (that I am after/that I am hunting)'

[HB040917\_1EChK\_6]

(2.26) *inw-øj när*  
 1SG.A-CL.food maize  
 'My maize (that is for me to eat)'

[HB050225\_1KYYM\_3]

(2.27) *b'aab'i yaan uy-äräk' peek' ich san.kristoob'al*  
 PN EXIST 3SG.A-CL.pet dog LOC TN  
 'Bobby had pet dogs in San Cristóbal'

[HB050225\_1KYYM\_3]

#### 2.4.2.3 Numerals

The Northern dialect of Lakandon spoken in Najá has retained the use of numeral classifiers while the Southern dialect of Lacanjá Chan Sayab' has not. There is perhaps more than one reason why this is the case, but the most obvious is that Southern Lakandon has lost all its numerals above the number 'three' or possibly even 'two'.

The only two numbers that speakers of the southern dialect agree on are *tuhri7* ('one') and *ka7tuhr* ('two'). The rest of the numbers up to 'five' come in different versions, possibly because speakers try to remember forms that are on the way of being lost and therefore make "guesses" as to what they should be called. All counting above the number 'two' in Southern Lakandon is done in Spanish.

The numerals in Northern Lakandon come from Yukatek only in the forms for the numbers 'one' to 'three'. All counting above 'three', uses the fingers, hands, feet, and the whole person to construct compound numeral expressions. There has been a re-invention of the entire numeral system in Northern Lakandon, most likely influenced by Tzeltal with whom the Northern Lakandones probably have had contact for some time.

One of my consultants, EChK is able to count to a hundred with little effort. But even the numeral system of NL is falling into disuse, giving way to Spanish. The system of numerals is inseparable from the numeral classifiers in Northern Lakandon, to which we now turn.

#### 2.4.2.4 Numeral classifiers

Numeral classifiers (NC) in NL are obligatorily used in numeral expressions and are positioned in the following way with regard to the numeral and to the counted noun: NUM-NC-(*i7*) N, *jun-p'ehr(-i7) waj* – 'one tortilla' (lit. one-thing tortilla). The referential marker *-i7* is suffixed to the classifier if the counted noun is absent, yielding the structure; NUM-NC-*i7*.

The classifiers have different origins within the lexicon of Lakandon. Some come from transitive verb roots while others are derived from nouns. The most common source by far is, however, positional roots. This is a feature from Yukatek that has been preserved in Northern Lakandon (cf. Lucy 1991).

Other Mayan languages like Tzeltal also have large numbers of classifiers derived from positional roots. I have approximately 90 numeral classifiers in my corpus that are

derived from positional roots. They also have a semantic content corresponding more or less to the semantics of the positionals.

Numeral classifiers can be divided into three groups. The first group is labelled “generic classifiers” and distinguishes *animate* from *inanimate* referents (all examples on numeral classifiers below are from, [classifiers 041116]):

### Group 1:

*P'EHR* (YUK n *p'ehr* ‘thing’)

- (2.28) *jun-p'ehr(-i7)*      *waj*  
           one-NCL.IAN(-REF)    tortilla  
           ‘One tortilla’

*TUHR* (YUK n *tuhr* ‘animate beings’ [persons, animals])

- (2.29) *jun-tuhr(-i7)*      *peek'*  
           one-NCL.AN(-REF) dog  
           ‘One dog’

The second group specifies the *shape*, *form*, and *position* of an object:

### Group 2:

*TZ'IHT* (YUK vtr *tz'ih* ‘long thin things’; ITZ ‘elongated objects’; LAK ‘of the same size’)

- (2.30) *jun-tz'ih*      *che7*  
           one-NCL.same.size wood  
           ‘One log of wood’

*KUHR* (YUK n *kuhr* ‘plant, hair’)

- (2.31) *jun-kuhr*      *chuhn*    *che7*  
           one-NCL.elongated stem    wood  
           ‘one tree stem’

The third group are classifiers of measure. This type of classifier appears to be less numerous in Lakandon than it is in Yukatek and Itzaj. I have only found a few classifiers in this group:

### Group 3:

*NAHB* (YUK vtr *nahb* 'handspan'; ITZ 'thumb to little finger')

- (2.32) *jun-nahb' k'äb'*  
one-NCL.width hand  
'From the thumb to the tip of the index finger'

*B'UHJ* (YUK vtr *b'uhj* 'split')

- (2.33) *jun-b'uhj chumuk (kaax)*  
one-NCL.one.side half (chicken)  
'One half of chicken'

Lastly, there are a couple of classifiers that fall outside of the more regular groupings. They include actions and things with quasi-reference to shape.

What remains of the system of numeral classifiers in Southern Lakandon are a few fixed expressions with a (mostly) non-numeral sense: *juntuhr* ('another', 'something else'); *junb'uhj* ('side', 'half'); *junyahr* ('some'); and *p'ehri7* ('same').

In Southern Lakandon, the generic classifier *tuhr* has become the word for 'one' in *tuhri7*, which is used to count all beings and things. "Measure classifiers" are present but the constructions they occur in are different:

- (2.34) *tuhri7 u-nahb' 7a-k'äb'*  
one 3SG.A-width 2SG.A-hand  
'one handspan'

- (2.35) *tuhri7 u-p'ihš=ruuch när*  
one 3SG.A-measure=gourd maize  
'one gourdful of maize'

[exx 2.28-2.29; Field Notes, PDLMA 2005]

#### 2.4.2.5 Number and plural marking

There are three ways to indicate number in Lakandon. One has just been discussed in the previous section on numerals. The other two are quantifiers, e.g. *ya7b'* ('much'), and *pihm* ('many'), and the plural enclitic: *-o7b'* (third person plural, second position enclitic). In Yukatek and Itzaj there is also a "distributive plural suffix", *-tak*, which has stopped being productive in Lakandon.

Plural marking is connected to the notion of definiteness which means that *indefinite*, quantified expressions are left without the *-o7b'* enclitic (all examples on number and plural marking in this section are from [Field Notes, PDLMA 2005]):

- (2.36) *jach pihm peek' ich 7u-paach 7aw-atooch*  
 very many dog LOC 3SG.A-back 2SG.A-house  
 'There are many dogs in the back of your house'

In (2.37), *-o7b'* is present in making definite reference to individuals:

- (2.37) *7oox-tuhr ti7ar-o7b'*  
 three-NCL.AN child-PL  
 'The three children'

As observed by Hofling (2000: 227), mass nouns such as *b'u7r* ('beans') are not pluralized. There is also a reluctance to use the plural enclitic with animate beings such as *kaax*, 'chicken(s)', and *peek'*, 'dog(s)', that also function as mass nouns.

Pluralisation is made possible by the presence of nominal classifiers since they in fact are operators of definiteness by being intimately connected to processes of possession. In (2.38) the nominal classifier *7äräk'* ('domesticated', 'pet') acts to specify the dogs as belonging to someone (cf. section 2.3.2.2):

- (2.38) *uy-äräk' peek'-o7b'*  
 3SG.A-CL.pet dog-PL  
 'The dogs (of other people)'

Definiteness is also a lexically inherent feature to inalienable nouns since they in fact must be possessed. They are thus automatically available for pluralisation. Examples (2.39), (ERG-) *b'äj* is contrasted with (2.34), which features a term, *mahk* ('people', 'someone'), that refers to any person or group of persons:

- (2.39) *7in-b'äj-o7b'*  
 1SG.A-REFL-PL  
 'My people (everyone who is like me)'

- (2.40) *pihm mahk-Ø yaan-i7*  
 many people EXIST-REF  
 'There are many persons'

When attached to single animate nouns, adjectives, or particles, *-o7b'* gets a pronominal 3PL reading and thus forms stative predicates:

- (2.41) *tzooy-o7b'*  
 good-3PL.B  
 'They are good'

- (2.42) *xiib'-o7b'*  
 man-3PL.B  
 'They are men'

The plural enclitic *-o7b'* marks both verb- and noun phrases but there is no obligatory agreement between freestanding arguments and the verb-complex. The absence of agreement is signalled by *-X* in bold:

- (2.43) *7a-ti7-o7b'-o7*                      *k-u-b'in-X*    *yejer*  
 DET-3.INDEF-PL-TD.DIST    INC-3SG.A-go    with  
 'They were going together'

- (2.44) *7a-ti7-X-o7*                      *b'uht'-o7b'*  
 DET-3.INDEF-TD.DIST    fat-PL  
 'They are fat'

Plural verb agreement is according to Hofling more common in Itzaj with animate nouns than with inanimate ones. It is unclear if this is the case in Lakandon where any plural agreement is hard to find. When a plural noun is topicalised in Itzaj, the plural is generally marked again. This is not necessarily so in Lakandon:

- (2.45) *7a-teen-o7b'-o7*                      *k-in-b'in-X*    *mahn-än*  
 DET-1SG.IND-PL-TD.DIST    INC-1SG.A-go    pass-PLN.IV
- tu7*    *k-u-ko7on-an*                      *o7ch*  
 where INC-3SG.A-buy-CPASS    food  
 'We are going to the market'

The distributive plural suffix *-tak* ('each and every') is regularly used with a few nouns and optionally with other nouns, adjectives and participles in Itzaj and Yukatek (Hofling

2000: 229). In Lakandon *-tak* has a high tone, *-tahk*, but has stopped being a productive suffix and only remains in a few expressions:

- (2.46) *7u-b'a7-tahk-o7b'*  
 3SG.A-thing-DTR-PL  
 'business/ lots of things'

- (2.47) *b'a7kir-tahk*  
 what-DTR  
 'which ever'

#### 2.4.2.6 Nominalisations

There are several nominalisation strategies in Lakandon Maya and in Yukatekan languages in general. The resulting semantics depend on the class membership of the root that is nominalised, but also on the nominalisation strategy used. Formally, we can distinguish between three outcomes: 1) *agent-nominalisations*, 2) *instrument-nominalisations*, and 3) *miscellaneous*.

With regard to agent-nominalisations there appears to have been a change in Lakandon Maya when compared to Yukatek and Itzaj. In those languages there is an agent prefix (*aj*)- that sometimes together with a nominalisation suffix, *-ir*, forms agent-nominalisations<sup>20</sup>. Lakandon has retained a reflex of the *aj*- prefix in *yäj*-, which makes it look more like a possessive construction (*uy-äj*- → *y-äj*-) with a reading like, 'the doer of something'. Any verbal predicate seems to be available for this construction. Below are some examples of a transitive root (*rej* – 'trap'), a derived transitive root with the causative suffix (*kihn-s* – 'kill'), and a loanword from Spanish (*rob'aj* – 'steal' [Sp. 'roba'])

- (2.48) *y-äj-rej-ihr*                      *b'aj*  
 3SG.A-AGNT-trap-NOM    mole  
 '(He is) a mole-trapper'

- (2.49) *y-äj-kihn-s-ir*                      *b'ahrum*  
 3SG.A-AGNT-die-CAUS-NOM    jaguar  
 '(He is) a jaguar-killer'

<sup>20</sup> Note that *aj*- as a prefix in agent nominalisations in Yuaktek and Itzaj is not to be confused with the previously mentioned prefix on nouns that functions as a classifier (see section 2.4.2.2)



- (2.50) *y-äj-roob'aj-ir*                      *b'a7r*  
 3SG.A-AGENT-steal(Sp.)-NOM    thing(s)  
 '(He is) a thief'

Agent-nominalisations are not reserved for transitive roots (derived or underived) but are also available for action verbal nouns (avn) that even though they are semi-nouns can form nominalisations using the *yäj-* prefix:

- (2.51) *y-äj-tz'ihb'-ir*  
 3SG.A-AGENT-write-NOM  
 '(He is) a writer'  
 [exx 2.42-2.45; 060920 MChKY]

That the *y-* preceding the *äj-* prefix is a setA person marker (see section 2.4.3.2) is evident from a change of person. '(He is) a helper' is translated as *yäjyahmin*, whereas 'my helper' becomes *inwäjyahmin*, with (*u*)*yäj-*, '3SG.A', becoming (*in*)*wäj-*, '1SG.A', as a consequence of a change in person inflection.

The semantically contrasting *patient-nominalisation* has no formally separate construction and thus only constitutes a semantic contrast in Lakandon Maya. The same construction that is used for agent-nominalisations is used to form these expressions as well. *yäjsätir* means 'loser', and *yäjk'ämin* 'receiver'. These expressions may be used to express a semantic role of patient but are constructed as subject, a 'loser' being translated as 'he is a loser (of things)'.

*Instrument-nominalisations* are constructed with the *-V-b'a(h)r* suffix. The exact meaning of a nominalisation that is made with this suffix depends on the root that is used. If a positional root is nominalised it may mean *a place* where you do something as well as *a tool* for doing something. Positional roots are valence-ambivalent which means that a "tool"-sense and "a place for doing things" both can be indicated.

If a transitive root is used then the meaning will be that of an instrument. The transitive root *jätz'*, meaning 'beat', forms *u-jätz'-ä-b'ahr*, which means 'beater' or 'something used to beat things with'. Non-transitive positional roots like *kur*, 'to sit', and *char*, 'to lie down', are generally not available for nominalisations with the *-V-b'ahr* suffix, but there are exceptions as in the case of *t'uch*, which is a positional root meaning 'to sit in a crouching position', yielding *ut'uchub'ahr*, meaning 'a place where you put a glass'. *t'uch* cannot be placed in a transitive construction using the *-ik* suffix.

Nominalisations of mono-valent verbs such as *kur* are formed in less predictable ways and the strategies used in nominalisation of such roots must be checked individually for each root. 'His seat', using *kur*, is formed by compounding *kur* with *tahn*, meaning 'front', or 'face', giving the expression *7u-kur-tahn*, glossed as '3SG.A-sit=surface'.

Compounding of nouns is a productive process that has yielded some interesting vocabulary by giving names to modern phenomena (compounding indicated by =), for example: *xiik' naj=cheem* – 'flying house=boat' ('aeroplane'); *yaka7=lu7m* – 'running=ground' ('car'). As evident from the examples here, compounding is done by placing two nouns adjacent to each other with the modifying noun before the modified noun: N1=N2, yielding a modified N2.

#### 2.4.2.7 Adjectives

Adjectives constitute a separate word class and are unavailable for inflection by verbal or nominal morphology. They cannot be possessed, nor do they carry status-aspect marking. They can, however, take person-number marking to form stative predicates like 'I am short' as seen in (2.46) below:

- (2.52) *kaab'ar-een*  
 short-1SG.B  
 'I am short'

A functional distinction between adjectives and particles/adverbs is usually made by assigning the former class as modifiers of nouns and the latter as modifiers of verbs and higher-level units like entire phrases. This distinction is not completely clear-cut since some particles can function like adjectives in this regard.

*jach* is one such particle. It is commonly regarded as a particle and basically functions as an adverbial in expressions like *jach tzooy*, meaning 'very good' or *jach k'aas*, meaning 'very bad'. There are, however, some compound expressions where *jach* looks very much like an adjective, such as *jach=t'aan*, which is the name for the language in Lakandon Maya that the speakers of the language use, meaning 'true speech/word'. This kind of compound is found in other names as well: *jach=b'ahrum* is the name for the spotted jaguar that lives in the Lakandon forest and is translated as 'the real jaguar'.

Exceptions aside, there is a moderately large group of adjective roots in the language, including colour terms, words for size and shape, along with judgements of

quality such as ‘good’, ‘bad’, etc. Moreover there are several suffixes that derive nouns and verbal roots into adjectives.

Adjectives can take derivational suffixes that allow them to function as verbs. There is the assumptive (Kaufman 1991) *-ta(h)r* suffix that combines with incomplete aspect; the conversive (ibid.), *-chäj(-är)* that also takes incomplete aspect but which can combine with all intransitive status suffixes to form expressions in the completive and the dependent status respectively: *-chäj(-ij)/-Ø*; *-chäj-äk*.

- (2.53) *pero k-u-saas-tahr tuhñ y-ir-aj-Ø manaʔ*  
 but INC-3SG.A-light-ASSUM then 3SG.A-see-CP-3SG.B NEG.EXIST  
 ‘But in the morning, then he didn’t see anything’  
 [HB040929\_1EChK\_5]

- (2.54) *k-u-jach=wij-chäj-är kij*  
 INC-3SG.A-very=hunger-CONV-PLN.IVQUOT  
 ‘He is (becoming) very hungry, he says’  
 [HB050211\_2\_2KYYM]

In (2.53) the inchoative stem *saas* (‘light’) forms an expression with *-tahr* that literally can be translated as ‘there is light’. The conversive *-chäj-* is seen together with the stem *wij* (‘hungry’) in (2.54).

Suffixation strategies that form adjectives from other roots depend on the class of the root. Positional roots can for example form adjectives by affixing the participial suffix *-aʔn*, but also by using the *-Vʔk-b’ahr/-Vʔk-b’äk* suffix, the latter of which depends on the by now familiar dialect division into SL and NL.

Other roots, i.e. nouns, transitive and intransitive verb roots, and particles take suffixes such as *-Vr*, *-b’en*, *-uch*, *-is*, *-ot*, and *-eʔn*. The definite distribution of these suffixes has yet to be determined, as it is quite irregular. For a complete mapping of how these suffixes are used to form adjectives, one needs to test all available lexemes individually, noun and verb roots alike, something that remains to be done.

Adjectives are open to partial or whole reduplication although as in the case of verbal reduplication, it appears less productive than in the neighbouring language Itzaj, which has a whole array of reduplication strategies at its disposal (see Hofling 2000). A few examples are listed directly below:

(2.55)a *chäkä(w)*  
'hot'

b *chäkä=chäkä*  
REDUP=hot  
'luke warm'

(2.56)a *säk*  
'white'

b *sä=säk*  
REDUP=white  
'very white'

(2.57)a *ki7*  
'good'

b *ki7=ki7*  
REDUP=good  
'very good'

Examples (2.56) and (2.57) are primarily used inside the verb phrase as modifiers of the verb which implies a function that is less like an adjective and more like an adverbial, while the roots themselves are clearly adjective in origin. Modification of an adjective by degree is otherwise done with adverbials like *ne* ('very') and the already mentioned *jach*, forming expressions like *jach säk*, 'very white', and *ne ki7*, 'very good'.

#### 2.4.2.8 Relational nouns

The subcategory of nouns that Kaufman (2002: 61-64) terms relational nouns consist of i) the generic but functionally diverse, *ti7* and *7ich*, both of which have the same etymological origin, and ii) a diverse range of nouns that serve to relate some proposition or entity to a point of reference.

The reason for considering the lexemes in this section to be relational nouns and not prepositions rests on the already established classification of the lexicon where all root classes are open to inflection except for the particle class. To call the relational nouns "prepositions" would be to draw on the wrong kind of associations and veil the class membership and its morpho-syntactic possibilities.

The following functions are relevant to the relational nouns in Lakandon: 1) *case marking*, 2) *reflexive pronouns*, and 3) *locative nouns*. All examples in this section are from [Field Notes, PDLMA 2005].

**Case marking:** The relational noun *ti7* is used for dative and benefactive constructions. It is also homophonic with the independent third person object marker *ti7*, since the setB-suffix for third person is zero. An example is seen in (2.58):

- (2.58) *7a-je7r-a7*                      *t-in-b'eet-aj-Ø*                      *ti7(-Ø)*  
 DET-OST-TD.PROX    COM-1SG.A-make-CP-3SG.B 3SG.IND  
 'I made this for him'

This phrase is comparable to (2.59) where the second person pronoun *teech* consists of *ti7* and *-eech* (2SG.B), forming an independent pronoun form.

- (2.59) *7a-je7r-a7*                      *t-in-b'eet-aj-Ø*                      *teech*  
 DET-OST-TD.PROX    COM-1SG.A-make-CP-3SG.B 2SG.IND  
 'I made this for you'

A dative/benefactive construction with *ti7* together with a full nominal argument reveals the construction clearly in (2.60) and (2.61):

- (2.60) *7a-xkiik-o7*                      *t-u-tz'aj-a(j)-Ø*                      *när ti7 xiib'*  
 DET-woman-TD.DIST    COM-3SG.A-give-CP-3SG.B    maize PREP man  
 'The woman gave maize to the man'

- (2.61) *je7*                      *inw-a7r-ik-Ø*                      *ti7 in-raak'*  
 ASSUR    1SG.A-say-PLN-3SG.B PREP 1SG.A-wife  
 'I will tell my wife'

The relational noun to mark *accompaniment* (2.63) and *instrument* (2.62), is *ye(h)jer*:

- (2.62) *b'in in-ka7*                      *7in-xat'-ej-Ø*                      *ju7n yejer*                      *u-xaat'-a-b'ahr*  
 FUT2 1SG.A-do 1SG.A-cut-DEP-3SG.B paper                      with                      3SG.A-cut.APASS-?-NOMSR  
 'I am going to cut the paper with a pair of scissors'

- (2.63) *ti7 yaan-een*                      *yejer Alfredo*  
 PREP EXIST-1SG.B                      with                      PN  
 'I am with Alfredo'

*Inanimate cause*, - 'because of' or 'by', is indicated by *tehn*:

- (2.64) *k-u-joop-s-a7r*    *k'ahk' tehn ihk'*  
 INC-3SG.A-extinguish-CAUS-CPASS                      fire                      by                      wind  
 'The fire was put out by the wind'

- (2.65) *7a-na7-o7                    ruh'b'    teh'n ja7*  
 DET-house-TD.DIST   fall.CP   by   water  
 'The house fell because of the water'

Alternatively used, and possibly restricted to animate causers, is *män*, which has also been reported for Itzaj, although there it denotes *inanimate* cause:

- (2.66) *7u-tohk=tzikk'-a7(r)    män   7ik-nuuk-ir*  
 3SG.A-just=tell-CPASS   by   1PL.A-great-NOM  
 'It was told by our ancestors'

There is no relational noun that marks possession in Lakandon, as reported for K'iche7, although the syntactic constructions of possession and locative relationship are identical. Compare (2.67a) and (2.67b):

- (2.67)a *7u-na7        in-na7*  
 3SG.A-house 1SG.A-mother  
 'My mother's house'
- b *7u-paach   in-na7*  
 3SG.A-back 1SG.A-mother  
 'Behind my mother'

Many Mayan languages use a relational noun to mark demoted direct objects in absolute anti-passive clauses (cf. Kaufman 2002), but this appears not to be the case in Lakandon despite the use of *ti7* to mark oblique arguments in benefactive constructions like the one in (2.60), above. The ungrammaticality<sup>21</sup> of the former construction is seen in (2.68):

- (2.68) *\*\*k-u-b'aa7 ti7 che7*  
 INC-3SG.A-chop.APASS wood  
 'He (axe-)chops the wood'

**Reflexive pronoun:** The reflexive pronoun *-b'äj* is used for (at least) two purposes. The first concerns strictly reflexive and reciprocal uses:

<sup>21</sup> Constructions that are ungrammatical or otherwise regarded as unnatural Lakandon Maya speech are marked with double stars (\*\*). This is done in order to reserve the single star (\*) for reconstructed proto-forms of words.

- (2.69) *7a-winik-o7 k-u-muhch'-kin-t-ik-Ø 7u-b'äj*  
 DET-person-TD.DIST INC-3SG.A-pile-CONV-TR-PLN-3SG.B 3SG.A-REFL  
 'The people meet (among themselves)'

The second use is for part-whole relationships such as body parts and kinship:

- (2.70) *7a-in-k'äb'-o7 u-b'äj 7in-kuuk*  
 DET-1SG.A-hand-TD.DIST 3SG.A-REFL 1SG.A-arm/elbow  
 'My hand is part of my arm'

- (2.71) *7a-in-yuhm-o7 u-b'äj 7in-na7*  
 DET-1SG.A-FB-TD.DIST 3SG.A-REFL 1SG.A-mother  
 'My uncle is part of my family'

There is (probably) no reflex of the emphatic pronoun found in K'iche7 and Tzeltal, *tukeel* 'by oneself', but another relational noun is present in *junaan*:

- (2.72) *t-a-junaan wa yaan-eech*  
 PREP-2SG.A-alone Q EXIST-2SG.B  
 'Are you by yourself?'

- (2.73) *7a-ro7 t-u-junaan*  
 DET-3SG.IND.TD.DIST PREP-3SG.A-alone  
 'He is by himself' or 'he is alone'

**Locative relational nouns:** There are two basic locative constructions using relational nouns: 1) *7ich* ERG-RN N and 2) RN N. The first construction consists mostly of body parts (BP) given analogical locative meanings.

*iit* 'under', 'beneath', BP: 'anus'

- (2.74)a *7a-u-k'ä7che7-o7 juhr-ij 7ich 7uy-iit ja7*  
 DET-3SG.A-tree.branch-TD.DIST sink-CP.IV LOC 3SG.A-under water  
 'The branch sank below the water surface'

*jo7or* 'over' 'above', BP: 'head'

- b *kur-uk-b'ahr 7ich 7u-jo7or naj*  
 sit-?- ASSUM LOC 3SG.A-over house  
 'It is sitting on the roof of the house'

*paach* ‘behind’ ‘outside of’, BP: ‘back’

c *7a-peek’-o7*      *ta-yaan*      *7ich 7u-paach*      *naj*  
DET-dog-TD.DIST SP.R.DIST-EXIST LOC 3SG.A-behind house  
‘The dog is behind the house’

*chumuk* ‘between’ ‘middle’

d *7a-tuunich-o7*      *ta-yaan*      *chumuk*      *yejer che7*  
DET-stone-TD.DIST SP.R.DIST-EXIST between with tree  
‘The stone is between the trees’

The use of body part terminology as grammaticalised devices in describing spatial relations is widespread in the languages of the world (cf. Svorou 1996) and is not specific to Lakandon Maya. It can be found in all Mayan languages and in many other Mesoamerican languages. An especially rich case in point can be found in Totonacan languages (cf. Levy 1999).

### 2.4.3 The verb phrase

The verb phrase is the most important grammatical construct in Mayan languages in general and Lakandon is no exception. The verb is inflected for *person*, *number*, *aspect-mood*, and *status*. The two latter inflectional categories are the most relevant for the purposes of the present investigation. They will be described in detail in chapter 4, which is devoted to describing the “grammar of time” and the different strategies that are available for making temporal reference in Lakandon Maya. In the present section, the two categories will only be superficially introduced. The full exposé is delayed until chapter 4.

#### 2.4.3.1 The verb and “split ergativity”

Lakandon is a headmarking language and therefore has its grammatical relations marked on the verb. The cross reference of participants on the verb in Yukatekan languages is done with two sets of pronoun markers. They consist of *ergative prefixes*, which are commonly called setA markers, and *absolutive suffixes/enclitics*, called setB markers.

Lakandon, like Yukatek, has a split-ergative, or a split-S system, where the “split” depends on the status inflection of intransitive verbs. The subject (S) of an intransitive



verb is marked as ergative if the verb is in the plain/incompletive status. If the intransitive verb is inflected for the dependent or completive status, then the absolutive marker is used:

**Intransitive:**

Incompletive/Plain:

- (2.75) a *k-u-kihm-in*  
 INC-3SG.A-die-PLN.IV  
 'He dies/is dying'

Completive:

- b *kihm-ij-Ø*  
 die-CP.IV-3SG.setB  
 'He died'

Agents (A) of *transitive* verbs are ergatively marked regardless of status marking:

**Transitive:**

Incompletive/Plain:

- (2.76)a *tz'o7k u-meet-ik-Ø 7a-waj*  
 TERM 1SG.A-make-PLN-3SG.B 2SG.A-tortilla  
 'He has finished making your torilla'

Completive:

- b *t-u-meet-aj-Ø 7a-waj*  
 COM-1SG.A-make-CP-3SG.B 2SG.A-tortilla  
 'He made your torilla'

**2.4.3.2 Person marking**

The range of available participant markings on the verb is achieved by combining the ergative prefixes and the absolutive suffixes. The full set of available person markers in Lakandon (but not their combinations) is the same as in Yukatek, and are displayed below in table 2.3. The examples found in this section come from [Field Notes, Personal pronouns Aug 2006]

	Set A	Set B
1	<i>in(w)-</i>	<i>-(e)en</i>
2	<i>a(w)-</i>	<i>-(e)ech</i>
3	<i>u(y)-</i>	<i>-Ø</i>
1PL	<i>(i)k-</i>	<i>-o7n</i>
2PL	-	<i>-e7x</i>
3PL	-	<i>-o7b'</i>

TABLE 2.3 PERSON MARKERS IN LAKANDON

Using the markers in the table above, Lakandon forms a rich variety of participant forms, most of which are available for the other Yukatekan languages, but a few that appear to be specific to Lakandon.

In table 2.4, the independent pronoun forms are presented to display the available distinctions and combinations:

	Singular	Plural 1	Plural 2	Plural 3
1	<i>teen</i>	<i>to7n</i>	<i>to7n-e7x(-o7b')</i>	<i>teen-o7b'</i>
2	<i>teech</i>	<i>te7x</i>	<i>teech-e7x(-o7b')</i>	<i>teech-o7b'</i>
3	<i>raji7</i>	<i>raji7-o7b'</i>	-	-

TABLE 2.4 INDEPENDENT PERSON MARKERS IN LAKANDON

The independent pronoun forms in table 2.4 are from both the Northern and the Southern dialect. They are visibly constructed with the suffix/enclitics of the absolutive setB and are the result of combining the setB suffix with the preposition *ti7* ('to', 'for'); i.e. *ti7-teen* → *t-teen* → *teen*. The third person forms are not constructed in this way as their origin lies with the nominal deictic form *ra7* ('that thing'). The *-i7* is a deictic anaphoric marker that combines with *ra7* to produce the independent third person pronoun form.

Independent pronouns can function as both emphatic *subjects* and *objects* in transitive constructions, which makes them neither ergative nor absolutive in nature.

There are plural forms for both first and second person. There is an *inclusive/exclusive* distinction as well as a *dual* form for first person. However, from looking at the use of the dual form in texts, it appears that it actually is an exclusive form that denotes a group including the speaker with a non-specified number of other participants (not including the addressee). The difference between the exclusive and the dual forms remains to be mapped out.

The pronoun suffixes are presented separately for SL and NL, to make visible existing differences between them.

NL:

	SG	Plural	Plural Incl.	Plural Excl.
1	-een	-o7n (dual)	-o7n-e7x/ -o7n-e7x-o7b'	-een-o7b'
2	-eech	-e7x	-	-
3	-Ø	-o7b'	-	-

TABLE 2.5 PRONOUN SUFFIXES IN NORTHERN LAKANDON

SL:

	SG	Plural	Plural Incl.	Plural Excl.
1	-een	-o7n (dual)	-o7n-e7x	-een-o7b'
2	-eech	-eech-e7x(-o7b')	-	-eech-o7b'
3	-Ø	-o7b'	-	-

TABLE 2.6 PRONOUN SUFFIXES IN SOUTHERN LAKANDON

Corresponding to the independent pronoun forms, the pronoun suffixes that were obtained by direct elicitation for both dialects are a bit unexpected as well, since they contain three forms that are unattested for Yukatek, namely *-eech-e7x(-o7b')*, *-o7n-e7x(-o7b')* and *-eech-o7b'*. It appears the Southern dialect has lost the second person plural *-e7x* that is present in both Yukatek and Itzaj, and instead uses *-eech-e7x*.

An explanation of the observed differences will not be attempted here. We will instead turn to investigate the cross-referencing system on the verb more closely.

The marking of *plural person* in the ergative case is achieved by a combination of the setA and setB markers. Second and third person plural in the ergative case consist of a two-part form with one setA prefix and one setB suffix; e.g. second person plural ergative is formed by combining the second person ergative prefix and the second person plural absolutive enclitic. We will start by observing how this is done with intransitives:

- (2.77) *k-a-kihm-in-e7x*  
 INC-2(SG).A-die-PLN.IV-2PL.B  
 'You all are dying'

Similarly, third person plural ergative is formed with the third person ergative prefix and the third person plural enclitic:

- (2.78) *k-u-kihm-in-o7b'*  
 INC-3(SG).A-die-PLN.IV-3PL.B  
 'They are dying'

Equative constructions and nominal predicates use setB suffixes in the following way:

- (2.79) *7a-teen*      *b'uht'-een*  
DET-1SG.IND   fat-1SG.B  
'I am fat'

In these types of constructions, the marking of persons in the plural is no different:

- (2.80)a *7a-to7ne7xo7b'*      *b'uht'-o7n-e7x*  
DET-1PL.IND.INCL   fat-1PL.B-2PL.B  
'We are fat (inclusive)'

- b *7a-teeche7x*      *b'uht'-eech-e7x*  
DET-2PL.IND   fat-2SG.B-2PL.B  
'You guys are fat'

Possessive constructions also make use of both sets of person markers. The ergative marker (i.e. setA) is the primary one used to indicate possession, but it is complemented in the plural by absolutive markers (setB) to indicate number and inclusion/exclusion, a process that is illustrated in (2.81), below.

- (2.81)a *ik-atooch*  
1PL.A-house  
'Our house (dual/exclusive)'
- b *inw-atooch-o7b'*  
1SG.A-house-3PL.B  
'Our house (exclusive)'
- c *ik-atooch-e7x*  
1PL.A-house-2PL.B  
'Our house (inclusive)'

When it comes to person marking on transitive verbs, the picture becomes a little bit more complicated. As stated, subjects are marked using setA prefixes and objects are marked with setB suffixes, but given the combination of both pre- and suffixes for some plural persons, the suffixation process is not completely transparent at first glance on transitive verbs. Consider example (2.82):

- (2.82) *t-aw-ir-aj-o7n-o7b'*  
 COM-2SG.A-see-CP-1PL.B-3PL.B  
 'You all saw us (excl./dual)'

In (2.82) the suffixes used to mark subject and object are placed in a "person hierarchy" with suffixes/enclitics belonging to the first person, placed closest to the stem and the third person at the far right in the phrase. This results in the situation in (2.82) where the plural subject marker suffix, *-o7b'*, is preceded by the object marker, *-o7n*. 'We saw you all' consequently looks like the following (subject markers in bold):

- (2.83) *t-inw-ir-eech-e7x-o7b'*  
 COM-1SG.A-see-2SG.B-2PL.B-3PL.B  
 'We (excl.) saw you all'

The plural suffix that together with the setA prefix indicates the plural number of the subject, *-o7b'*, is preceded by two setB suffixes, namely *-eech* and *-e7x* indicating the second person plural object. As stated, Lakandon does not place the subject (plural) marker closest to the stem, but rather places the person (plural) marker *highest in the person hierarchy*, closest to the stem.

Kaufman (1991:117) cites an example attested for Yukatek of a reversed order, *7ahnt-e7x-o7n* – 'yall help us!'. Following the proposed hierarchy, the order of *-e7x* (second person) and *-o7n* (first person) should according to the proposed hierarchy be placed the other way around, but is reversed in this specific construction. Curiously, an exception to the hierarchy is also attested for Lakandon, but not the same as the one given for Yukatek. Example (2.84), is the same construction given in (2.83) with regard to meaning and function, but not in form:

- (2.84) *t-inw-ir-o7b'-eech-e7x*  
 COM-1SG.A-see-3PL.B-2SG.B-2PL.B  
 'We saw you all'

In relation to this, Kaufman also states that the third person plural suffix, *-o7b'*, is prohibited from occurring twice within the same verb phrase. Such a repetition of *-o7b'* was however attested (twice) for Lakandon in elicitation with a NL speaker from Najá

as seen in example (2.85). A speaker of SL rejected this construction in line with what has been reported for Yukatek.

- (2.85)a *t-aw-ir-aj-o7b'-o7b'*  
 COM-2SG.A-see-CP-3PL.B-3PL.B  
 'You all saw them'
- b *t-inw-ir-aj-o7b-'o7b'*  
 COM-1SG.A-see-CP-3PL.B-3PL.B  
 'We saw them'

Indeed, it seems that NL allows combinations of forms that are rejected by speakers of SL. The reasons for these differences are subject to further investigation but it seems that both dialects have kept different aspects of the system for person marking found in Yukatek.

The combination of forms that were rejected by the speaker of SL, but elicited from a NL speaker, are listed below (person markers in bold):

NL:

- (2.86)a *k-uy-ir-ik-e7x*  
 INC-3SG.A-see-PLN-2PL.B  
 'He sees you all'
- b *t-inw-ir-aj-o7b'-o7b'*  
 COM-1SG.A-see-CP-3PL.B-3PL.B  
 'We (exclusive) saw them'
- c *t-uy-ir-aj-o7on-e7x-o7b'*  
 COM-3SG.A-see-CP-1.PL.B-2PL.B-3PL.B  
 'They saw us (inclusive)'
- d *raji7o7b' t-uy-ir-aj-e7x-o7b'*  
 3PL.IND COM-3SG.A-see-CP-2PL.B-3PL.B  
 'They saw you all'

Compare the constructions above with the forms for SL, below:

SL:

- (2.87)a *k-uy-ir-ik-eech-e7x*  
 INC-3SG.A-see-PLN-2PL.B  
 'He sees you all'

- b *?t-inw-ir-aj-o7b'*                      *raji7o7b'*  
 COM-1SG.A-see-CP-3PL.B    3PL.IND  
 'We (exclusive) saw them'
- c *?raji7o7b' t-uy-ir-aj-o7n-e7x*  
 3PL.IND        COM-3SG.A-see-CP-1.PL.B-2PL.B  
 'They saw us (inclusive)'
- d *raji7-o7b' t-uy-ir-aj-eech-e7x*  
 3PL.IND        COM-3SG.A-see-CP-2SG.B-2PL.B  
 'They saw you all'

The rejected combinations display three features that apparently are dispreferred by speakers of SL; 1) rejection of *-e7x* appearing by itself without the accompanying *-eech* (unless the *-eech* is substituted by the *a(w)-* prefix in the case that it marks the agent), 2) the rejection of a repetition of the *-o7b'* suffix as reported for Yukatek, and 3) avoiding a combination of three suffixes in a row. In order to avoid a sequence of three suffixes, the plural suffix of the subject is left out from the verb itself and is only present as an independent pronoun that usually becomes placed in focus position (2.87d).

#### 2.4.3.3 Aspect-Mood and status marking

Aspect and mood (AM) marking is achieved by prefixation or prepositioning of free-standing stative<sup>22</sup> verbal predicates directly before the main verb. The use of (one of two existing) prefixes is seen in (2.81a) and a prepositioned modifier in (2.88b):

- (2.88)a *k-in-b'eet-ik-Ø*                      *waj*  
 INC-1SG.A-make-PLN-3SG.B tortilla  
 'I am making (a) tortilla(s)/ I make tortillas'
- b *yaan in-b'eet-ik-Ø*                      *waj*  
 OBL 1SG.A-make-PLN-3SG.B tortilla  
 'I have to make tortillas'

<sup>22</sup> The notion of stative verb/predicate is taken from Bohnemyer (1998) and pertains to AM-marking in Yukatek. Stative in this sense means that the predicate is unavailable for AM- and status inflection (but not for person inflection, cf. *ibid.*: 119pp). This use of the term is not to be confused with a meaning that relates to a certain class of verbs that denote posture and configuration such as 'sit', 'stand', 'lay', etc. It represents a grammatical distinction that is warranted by the properties of the predicates that function as AM-markers. Thanks to Eva Lindström at Stockholm University, for making me aware of the difference. The distinction between the two uses is, however, entirely my own responsibility.

The syntactic consequence of the strategy found in (2.88b) is a one-place predicate (*yaan*) that takes the (main) verb (*b'eet*) as its argument. This means that prepositioned verbs/adverbs should not be regarded as auxiliaries but as main predicates followed by a dependent verb-phrase.

There is small group of lexemes that serve this function and they contrast with regular adverbs since the former are connected to morphological consequences that regular adverbs do not require. More on these differences is said in chapter 4.

Status markers are *suffixes* that signal valence and interact with AM-markers. However, status markers do not determine aspect-mood but only stand in a grammatical relationship to such markers, and they appear free from semantic value in this regard (but see Bohnemeyer 1998 for Yukatek). Example (2.88) is repeated here with the status marker highlighted:

- (2.88)a *k-in-b'eet-ik-Ø*                      *waj*  
 INC-1SG.A-make-PLN-3SG.B      tortilla  
 'I am making (a) tortilla(s)/ I make tortillas'

It appears that the function of status markers to signal valence extends to a more intimate connection featuring argument structure and how it can be seen to interact with lexical roots. This observation is explored in Lucy (1994) who provides evidence for Yukatek, and in Bergqvist (forthcoming) who develops the argument for Lakandon.

A more complete discussion and a listing of the available status and AM-markers is found in chapter 4, below.

#### 2.4.3.4 Verb-phrase incorporation

There are three basic incorporation strategies in Lakandon: 1) *modification* (by means of verbs, adverbials, and adjectives), 2) *object incorporation*, and 3) *instrument incorporation*. The most common is the *modification* of a verb by an adverbial or adjective. This is done by inserting the incorporated element before the verb: Aspect-Person-Modifier-Verb-Status-Number.

- (2.89) *k-u-ki7=k'äx-ik-Ø*                      *u-jaarar*  
 INC-3SG.A-well=tie-PLN-3SG.B 3SG.A-arrows  
 'He ties his arrows well'



There is a wide variety of elements that can modify a verb by being incorporated into the verb phrase. Some, but not all, of these elements can also be placed outside of the verb phrase.

- (2.90)a *k-u-seeb'=jaan-t-ik-Ø*  
 INC-3SG.A-quick=eat-TR-PLN-3SG.B  
 'He eats quickly'
- b *seeb' k-u-jaan-t-ik-Ø*  
 quick INC-3SG.A-eat-TR-PLN-3SG.B  
 'He eats quickly'

On the other hand, AM-markers cannot be moved inside the verb phrase with one exception: the modality marker *jaan* (see section 4.2). It can occupy both places but it is not clear what the semantic difference may be. The meaning appears identical in both constructions. The grammatical difference between adverbial modifiers and AM-markers has already been stated above (section 2.4.3.3) and will be explored in detail in chapter 4.

- (2.91)a *yaan in-b'eet-ik-Ø*                      *a-waj*  
 OBL 1SG.A-make-PLN-3SG.B 2SG.A-tortilla  
 'I have to make your tortilla'
- b *in-yaan=b'eet-ik-Ø*                      *a-waj*  
 1SG.A-OBL=make-PLN-3SG.B 2SG.A-tortilla  
 'I have to make your tortilla'

Another, not so common form of modification by incorporation, is when a second verb is placed before the main verb as seen in (2.92). This form of incorporation may be more like a compound expression, but the difference cannot be detected from looking at the example alone.

- (2.92) *k-u-jahw=jätz'-t-ik-Ø*  
 INC-3SG.A-open=strike-TR-PLN-3SG.B  
 'He strikes it open'
- [060911 EChK]

The process is not predictable with regard to which stems are available, but it appears productive. Note that the incorporated verb is made intransitive by lengthening the

vowel and deriving it with a high tone. It is not a combination of two transitive verbs but a modification of a transitive verb by an intransitive verb:

- (2.93) *k-u-tahk'*=*jätz'-t-ik-Ø*                      *a-p'u7k*  
 INC-3SG.A-bother=strike-TR-PLN-3SG.B    2SG.A-cheek  
 'He slaps your cheek'  
 (*täk'* - 'to bother s/o' → *tahk'* - 'to be bothered'; *jätz'* - 'strike sth')  
 [060921 MChKY]

A second incorporation strategy is the incorporation of objects in the form of nouns into the verb phrase. This results in an anti-passive construction, which entails a focus on the agent without the presence of a direct object. This form of incorporation is syntactically different from the modificational incorporation, above. The incorporated object is placed after the anti-passive verb.

In (2.94a) the transitive verb for 'chop' is inflected as a regular transitive verb. In (2.94b) the verb is derived as an anti-passive verb by the lengthening of the vowel, making the construction intransitive. Finally, in (2.94c) the oblique object is incorporated into the verb phrase, thus allowing the construction to remain intransitive. Another example of this without the vowel lengthening is seen in (2.95):

- (2.94)a *k-u-ch'äk-ik-Ø*  
 INC-3SG.A-chop-PLN-3SG.B  
 'He chops it'
- b *k-u-ch'aak*  
 INC-3SG.A-chop.APASS  
 'He chops (things)'
- c *k-u-ch'aak=che7*  
 INC-3SG.A-chop.APASS=wood  
 'He tree-chops'
- (2.95) *k-u-p'o7=nook'*  
 INC-3SG.A-wash.APASS=clothes  
 'He clothes-washes'  
 [060921 MChKY]

There is a second kind of noun-incorporation, namely instrument-incorporation. The nominal element is not in the form of an object but as a specifier/instrument used in the

action described. The construction is clearly separated from the anti-passive object incorporating one described above, since instrument incorporation results in a fully transitive verb as indicated by the transitivizer *-t-*. The resulting construction is not available for anti-passivization (2.96b) and takes a direct object as an argument.

- (2.96)a *k-u-tziitz=ja7-t-ik-Ø*  
 INC-3SG.A-sprinkle=water-TR-PLN-3SG.B  
 'He sprinkles it with water'

- b \*\* *k-u-tziitz=ja7*  
 INC-3SG.A-sprinkle=water

[060921 MChKY]

Commonly incorporated instrumental elements are body-parts. Such constructions are known from Yukatek, but they are generally only formed with a restricted set of body parts. The ones I have come across are, 'hand' (*k'äb'*) and 'eye' (*7ich*), as seen in examples (2.97) and (2.98), below:

- (2.97) *k-u-tz'op=k'äb'-t-ik-Ø*  
 INC-3SG.A-dip=hand-TR-PLN-3SG.B  
 'He dips his hand into it' (into something soft or runny)  
 [060921 MChKY]

- (2.98) *k-u-rehk'=7ich-t-ik-Ø*  
 INC-3SG.A-move(?)=eye-TR-PLN-3SG.B  
 'He glances from the corner of the eye'  
 [060921 MChKY]

Not all combinations are transparent. In example (2.99) the component parts of the verb phrase do not describe the action as such, at least not to the outside observer. There, the verb 'cook' (*chäk*) is combined with 'chilli' (*iik*), but it does not translate as 'to cook chilli (for someone)', but 'to rub chilli on someone' (e.g. on a witch, since they don't like chilli). If the noun is taken outside of the verb phrase, then the meaning is simply 'to cook chilli', but the incorporated phrase has a different meaning, as stated above:

- (2.99) *k-u-chäk=iik-t-ik-Ø*  
 INC-3SG.A-cook=chilli-TR-PLN-3SG.B  
 'He rubs it with chilli'.  
 [060921 MChKY]

#### 2.4.3.5 Reduplication

A process that appears very similar to incorporation of a modifier is reduplication. Reduplication functions semantically as a form of modification and the position of the reduplicated element is the same as for a modifier. The resulting meaning is predictable but less productive if compared to Yukatek and Itzaj, both of which appear to have complete and partial reduplication available for most verbs. All examples in this section are from [060920 MChKY].

Some transitive and positional verbs allow partial reduplication with an inserted glottal stop to indicate repeated action, as seen in (2.100)a and b:

(2.100)a *k-u-puch'-ik-Ø*

INC-3SG.A-crush-PLN-3SG.B

'He crushes it (with a mortar)'

b *k-u-pu7=puch'-ik-Ø*

INC-3SG.A-REDUP=crush-PLN-3SG.B

'He crushes it repeatedly (with a mortar)'

Some stems appear to be affected by the insertion of the glottal stop in the reduplicated element, so that it also comes to carry the glottal stop too:

(2.101)a *k-u-tup-ik-Ø*

INC-3SG.A-extinguish-PLN.TR-3SG.B

'He extinguishes it'

b *k-u-tu7=tu7p-ik-Ø*

INC-3SG.A-REDUP=extinguish-PLN-3SG.B

'He extinguishes it repeatedly'

Less commonly, some transitive stems allow partial reduplication without insertion of a glottal stop. In (2.102) is an example with an incorporated reduplicated stem (*mäx*):

(2.102) *k-u-mä=mäx=jätz'-t-ik-Ø*

INC-3SG.A-REDUP=flatten=beat-TR-PLN-3SG.B

'He squashes it (e.g. onions and other vegetables; *mäx* - 'flatten'; *jätz'* - 'beat')

Although partial reduplication is attested for some stems in Lakandon it does not seem to be quite as saliently productive as in Yukatek (Bricker et al. 1998). Several commonly used transitive stems are unavailable for any form of reduplication.

#### 2.4.3.6 Valence decreasing operations: passives and anti-passives

There are four types of passive constructions in Lakandon that change the valence of a transitive root to give it an intransitive status with focus on the patient. They are: 1) *Middle passive* (non-agentive), 2) *Canonical passive*, 3) *Agent-less passive*, and 4) *Celeritive passive*. The labels used conform to the terminology used in Mayan linguistics (cf. Kaufman 1991, Hofling 2000). All examples on passivisation are from [Field Notes, PDLMA 2005].

The *middle passives* have the V lengthened and given a high tone (e.g. *ä* changes to *ah*) in CVC root transitives. They drop the transitive status suffix *-ik* and instead take the intransitive suffix *-Vr*:

(2.103)	<i>k-u-sätz'-ik</i>	<i>u-koor</i>	→	<i>k-u-sahztz'-är</i>
	INC-3SG.A-enlarge-PLN	3SG.A-milpa		INC-3SG.A-enlarge.MPASS-PLN.IV
	'He enlarges his cornfield'			'It is enlarged'

The *canonical passive* with a third person agent has a glottal stop inserted and takes the *-Vr* suffix with CVC root transitives:

(2.104)	<i>k-u-sätz'-ik</i>	<i>u-koor</i>	→	<i>k-u-saʔtz'-är</i>
	INC-3SG.A-enlarge-PLN	3SG.A-milpa		INC-3SG.A-enlarge.CPASS-PLN.IV
	'He enlarges his cornfield'			'It is made bigger'

*Agentless passives* result in no phonological changes but take the suffixes *-päj(-är)* with CVC root transitives:

(2.105)	<i>k-u-sätz'-ik</i>	<i>u-koor</i>	→	<i>k-u-sätz'-päj-är</i>
	INC-3SG.A-enlarge-PLN	3SG.A-milpa		INC-3SG.A-enlarge-AGPASS-PLN.IV
	'He enlarges his cornfield'			'It becomes bigger'

The *celeritive passive* is constructed in the same way as the agentless passive and undergoes no phonological change with CVC root transitives, but takes the suffixes *-k'äj(-är)*:

- (2.106) *k-u-sätz'-ik*                      *u-koor*                      →                      *k-u-sätz'-k'äj-är*  
 INC-3SG.A-enlarge-PLN    3SG.A-milpa                      INC-3SG.A-enlarge.CELPASS-PLN.IV  
 'He enlarges his cornfield'                      'It became bigger'

It is important to note that the celeritive passive is not accepted for most verbs and it is usually judged as being strange sounding. Depending on the verb used, the semantic connection to 'suddenness' or 'speed of event', as the label suggests, may or may not be present.

*Derived transitive roots*, i.e. non-CVC roots, also have different passivization morphology. Middle passive forms with CV7 root transitives such as *chi7*, have *-b'* inserted before an *-ar* suffix:

- (2.107) *k-u-chi7-ik*                      →                      *k-u-chi7-b'-ar*  
 INC-3SG.A-bite-PLN                      INC-3SG.A-bite-DER.MPASS-PLN.MPASS  
 'He bites it'                      'It gets bit'

Some roots like the verb *pa7* ('to ruin sth') have no attested middle passive form. CV7 transitive roots also form the canonical passive with the inserted *-b'*, but take the *-Vr* suffix:

- (2.108) *k-u-chi7-ik*                      →                      *k-u-chi7-b'-ir*  
 INC-3SG.A-bite-PLN                      INC-3SG.A-bite-DER.CPASS-PLN.IV  
 'He bites it'                      'It is bitten'

The agentless passive has the same pattern of formation with all roots, i.e. it just suffixes *-päj-är* without any change to the root itself.

Derived transitive roots with (a) CV7C, (b) CVhC, and (c) CVCVC.t shapes, form the middle passive voice with the *-a7* suffix:

- (2.109) a                      *k-u-t'u7ur-ik*                      →                      *k-u-t'u7ur-a7*  
                                  INC-3SG.A-cross-PLN                      INC-3SG.A-cross-DER.MPASS  
                                  'He crosses it'                      'It crosses'
- b                      *k-u-suhs-ik*                      →                      *k-u-suhs-a7*  
                                  INC-3SG.A-even-PLN                      INC-3SG.A-even-DER.MPASS  
                                  'He evens it (the board)'                      'It evens out'

c	<i>k-u-sajab'-t-ik</i>	→	<i>k-u-sajab'-t-a7</i>
	INC-3SG.A-polish-TR-PLN		INC-3SG.A-polish-TR-DER.MPASS
	'He polishes it'		'It polishes'

The same derived root transitives take the *-a7r* suffix to form the canonical passive:

(2.110) a	<i>k-u-t'u7ur-ik</i>	→	<i>k-u-t'u7ur-a7r</i>
	INC-3SG.A-cross-PLN		INC-3SG.A-cross-DER.CPASS
	'He crosses it'		'It is crossed'
b	<i>k-u-suhs-ik</i>	→	<i>k-u-suhs-a7r</i>
	INC-3SG.A-even-PLN		INC-3SG.A-even-DER.CPASS
	'He evens it (the board)'		'It is evened'
c	<i>k-u-sajab'-t-ik</i>	→	<i>k-u-sajab'-t-a7r</i>
	INC-3SG.A-polish-TR-PLN		INC-3SG.A-cross-TR-DER.CPASS
	'He polishes it'		'It is polished'

For these derived transitive roots, the middle passive in the completive status is formed with *-b'-ij*, with the exception of CVhC (*'suhs'*) for which I have no attested form.

The completive suffix for the canonical passive is *-a7b'* with the derived roots, CV7VC, CVhC, and CVCVC.t. CV7 roots like *chi7* and *pa7* have no attested form in the canonical passive:

	INC		COM
(2.111) a	<i>k-u-t'u7ur-a7r</i>	→	<i>t'u7ur-a7b'</i>
	INC-3SG.A-cross-DER.CPASS		cross-CP.DER.CPASS
	'It is crossed'		'It was crossed'
b	<i>k-u-suhs-a7r</i>	→	<i>suhs-a7b'</i>
	INC-3SG.A-even-DER.CPASS		even-CP.DER.CPASS
	'it is evened'		'it was evened'
c	<i>k-u-sajab'-t-a7r</i>	→	<i>sajab'-t-a7b'</i>
	INC-3SG.A-polish-TR-DER.CPASS		polish-TR-CP.DER.CPASS
	'it is polished'		'it was polished'

Agentless passives with all roots are formed with *-päj(-ij)* in the completive status.

Anti-passives demote the object in the phrase to occupy an oblique role, i.e. one that is outside of the verb phrase and is unmarked on the verb. It also has consequences for the quality of the vowel in the verb root that is anti-passivised.

Anti-passivisation was introduced in section 2.4.3.4 and the example used to illustrate the process is repeated here. A transitive root has its vowel lengthened and at the same time becomes a one-place verb. An object may be incorporated but this is does not appear to be a common/productive strategy for most verbs, but is mostly done with idiomatic expressions such as the one seen in (2.112c):

- (2.112) a *k-u-ch'äk-ik-Ø*  
 INC-3SG.A-chop-PLN-3SG.B  
 'He chops it'
- b *k-u-ch'aak*  
 INC-3SG.A-chop.APASS  
 'He chops (things)'
- c *k-u-ch'aak=che7*  
 INC-3SG.A-chop.APASS=wood  
 'He tree-chops'

Other statuses than the plain (which has a zero marker) takes the *-n-* suffix:

- (2.113) *chaak-n-aj-Ø*  
 chop.APASS-AP-CP-3SG.B  
 'He chopped (sth)'

#### 2.4.3.7 Valence increasing operations: causatives and applicatives

Adding arguments to a predicate is less complicated than subtracting them in Lakandon Maya. There are no phonological consequences to causativisation or transitivisation like the ones we saw for the passives and anti-passives in the section above. There is only morphology involved when one increases the valence of a nominal, inchoative, or verbal (one-place) predicate.

Bricker et al. (1998) identifies nine different strategies for transitivisation and causativisation in Yukatek, but only some of them are attested for Lakandon. The system appears simplified in Lakandon when it is compared to Yukatek.

The available devices in Lakandon are: *-s-*, (2.114) which is the causative suffix used with intransitive roots; *-t-*, (2.115) the transitivising suffix used with nouns and action nouns/agentive nouns; *-kin-t-*, (2.116) which transitivises inchoative, some



nominal, and positional roots, and the miscellaneous *-r-* (2.117) that is found with a restricted number of adjective and nominal roots. All strategies are exemplified below:

- (2.114) *in-yuum ma7 u-ka7m-s-eeen b'iktahb'ar*  
 1SG.A-FB NEG1 3SG.A-learn-CAUS-1SG.B how

*u-k'uj-in-t-ik-o7b' k'uj*  
 3SG.A-god-CONV-TR-PLN-3PL.B god  
 'My uncle taught me how they worshipped the Gods'  
 [HB041028\_1CChKY\_1]

- (2.115) *k-u-che7-t-ik-Ø b'in t'u7r-o7 jajajaja*  
 INC-3SG.A-laugh-TR-PLN-3SG.B REPORT rabbit-TD.DIST SS  
 'The rabbit was laughing: hahahaha'  
 [HB041028\_1CChKY\_5]

- (2.116) *este b'iktahb'ar-e7x a-k'uj-(k)in-t-ik-e7x k'uj*  
 this.one(Sp.) how-2PL.EXCL 2SG.A-god-CONV-TR-PLN-2PL.B god  
 'So, how do you worship the Gods'  
 [HB041028\_1CChKY\_1]

- (2.117) *k-in-muk-r-ik-Ø*  
 INC-1SG.A-bury-TR-PLN-3SG.B  
 'I deny it' (cf. *muukur* – 'sealed')  
 [060921 MChKY]

The derivation in (2.117) by means of *-r-* is a limited strategy. Of the few attested examples, some of the resulting transitive readings are also non-predictable from the original meaning found in the intransitive root, e.g. *yookor* ('he enters') → *k-u-yak-r-ik* ('he steals it').

Important differences between the data that Bricker et al. present for Yukatek and the observations I have for Lakandon, is that both the first (*-s-*) and third (*-kin-t-*) strategies appear to be available for inchoative roots, i.e. both *k-u-säj-kin-t-ik* ('he whitens it'), and *k-u-säk-s-ik* ('he whitens it') are attested with little semantic difference between the two.

The combination of *-s-* with *-kin-*, to form *-kin(-s-)/-kun(-s-)*, that is attested for Yukatek, is not available for Lakandon. Instead there is the parallel use of *-s-* and *kin-t-*.

With a restricted set of roots, the celeretive *-k'-äs-* suffix is used, although it appears to have gone through a reanalysis if compared to how it is used in Yukatek. There, the suffix is analysed as a combination of the celeretive *-k'-* with the causative *-(e)s-* which also occurs with *-b'-* in causative *-b'-es-* constructions (cf. Bricker et al. 1998: 336-337). In Lakandon the combined suffixes have fused to form a single suffix that has some other function than as a transitiviser, since it takes the *-t-* suffix in addition to the *-k'äs-* suffix.

In example (2.118) below, the celeretive *-k'äj-* has an intransitive function much like the inchoative *-chäj-* suffix used with adjective stems (see 2.4.2.7), but to indicate “suddenness” in an action or event:

- (2.118) *k-u-jäw-k'äj-är*  
 INC-3SG.A-open-CEL-PLN.IV  
 ‘It flips over’  
 [060921 MChKY]

In (2.119), the *-k'äj-* suffix has changed to *-k'äs-*, but it has to be combined with *-t-* in order to transitivise the phrase:

- (2.119) *k-u-jäw-k'äs-t-ik-Ø*  
 INC-3SG.A-open-CEL-TR-PLN-3SG.B  
 ‘He flips it over’  
 [060921 MChKY]

It appears that the *-k'äs-* suffix, as a whole, has become the celeretive suffix *without* functioning as a causativiser since Lakandon speakers reject a combination of *-s-* and *-t-* in the same construction.

The same scenario is true for the attested *-b'-es-* causative from Yukatek. In Lakandon this suffix has undergone a reanalysis where it no longer has a transitivising function. Although attested, the *-b'es-/b'äs-* suffix combines with *-t-* to transitivise some nouns, as seen in (2.120):

- (2.120) *k-in-b'ee(r)-b'es-t-ik-Ø*                      *in-b'eer*  
 INC-1SG.A-trail-CAUS-TR-PLN-3SG.B 1SG.A-trail  
 ‘I am opening the trail’ (root: *b'eer* ‘road’)  
 [060921 MChKY]

Finally, it appears that some nouns and action nouns can be used as transitive roots without any visible derivation. For instance, *p'u7k* ('cheek') can form *k-u-p'u7k-ik* to mean 'he carries water in his mouth'.

#### 2.4.3.8 Positional- and affect roots

Positional- and affect roots are presented together here although they are very different in most respects. The positional root class is a large and well-defined one, whereas the affects are defined semantically since the origin of many of the roots commonly is with other root classes. Affect roots denote the look, feel, smell, or sound of something and are often sound symbolic. The examples on positional- and affect verbs in this section come from [Field Notes, PDLMA 2005] unless otherwise specified.

Bricker states for Yukatek that members from several root classes, including *nouns*, *adjectives*, and *transitive verbs*, can be derived into affect verbs. She lists two derivational suffixes that produce affect verbs, namely *-b'al* and *-ankil*. Affect verbs with either of these two suffixes then take the anti-passive *-n-* suffix to make possible inflection for the completive and dependent status.

The process is not the same in Lakandon, where a reflex of the *-b'al* suffix is unattested. The second suffix is indeed found in Lakandon in the suffix *-a(h)nkär*. This suffix combines with nouns, action nouns, adjectives and transitive verbs just like Bricker states for Yukatek. Below are a few examples of how different roots combine with the *-a(h)nkär* suffix:

Sound Symbolic root (ss): *tzirin=tzirin*

(2.121) *k-u-tzirin=tzirin-ahnkär*

INC-3SG.A-tingle=tingle-CONT

'It tingles/chimes (like small pieces of metal)'

Action Verbal Noun (avn): *kiis*

(2.122) *k-u-kiis-ankär*

INC-3SG.A-fart-CONT

'He farts repeatedly (like wild pigs)'

Noun: *wi7*

(2.123) *k-u-wi7-ankän*

INC-3SG.A-give.fruit-CONT

'It grows into a bulb'

Root Transitive: *b'ok* (anti-passivised: *b'ook*)

(2.124) *k-u-b'ook-ankär*

INC-3SG.A-smell-CONT

'It gives off a scent'

[exx 2.121-2.124, 060918 MChKY]

All instances of *-ankär* point to a 'cyclic', 'iterative' or 'continuous' meaning inherent to the suffix as illustrated by the examples above. It may be called an aspectual suffix, although there is no category of such suffixes that it belongs to. Its meaning is, however, aspect-like.

Positional roots are an important class of verbs in all Mayan languages. They are defined semantically as denoting the shape, posture, distribution, and position of an object. Positionals also have inflectional and derivational morphology in common. A peculiar feature that has been attested for positionals in other non-Mayan languages as well (e.g. Bantu languages) is that some positional roots have a transitive function along with the intransitive one without requiring any overt derivational morphology. This situation is exemplified by the positional root *jup*, in (2.125) and (2.126):

(2.125) *k-u-jup-ik-Ø*                      *u-k'äb' ich ja7*  
INC-3SG.A-insert-PLN-3SG.B    3SG.A    LOC    water  
'He puts his hand into the water'

(2.126) *jup-uk-b'ahr*  
insert-?-POS.PARTC  
'It is inserted'

[060923 MChKY]

About half of all positional roots in Lakandon have a transitive function alongside the intransitive one. Positional and transitive roots also have morphology in common, e.g. the two participles, *-a7n* and *-b'ir*, which are used with both types of roots.

Positional roots in Lakandon predominantly have short vowels (CVC), and the available inflections and derivations are: *-tahr*, which is the same assumptive suffix that is used with inchoative stems. The inflectional suffix that all positionals have in common is *-r-*. It is cognate to the *-l-* found in Yukatek and it is present with the completive (2.127) and the dependent statuses (2.128). It is also used in imperative constructions (2.129):

(2.127) *t'uch-r-aj*  
 squat-POS-CP  
 'He squatted'

(2.128) *ka7 t'uch-r-ak*  
 OPT squat-POS-DEP.IV  
 'that he squats'

(2.129) *t'uch-r-en*  
 squat-POS-IMP  
 'Squat!'

A derivational suffix used to form adjectives that is specific to positionals is the *-Vk-b'a(h)r* suffix (2.130). The suffixes used to derive participles (2.131a-b) and instrumental nouns (2.132) can also be used with other roots. Causativisation (2.133) is done using the same suffixes (*-kin-t*) that are used with inchoative roots. Finally, positionals roots can also be combined with other roots such as nouns to form compound expressions (2.134):

(2.130) *t'uch-uk-b'ahr*  
 squat-?-POS.PARTC  
 '(It is) squatted' (Northern Lakandon: *-Vk-b'ak* alt. *-Vk-b'äk*)

(2.131) *t'uch-a7n*  
 squat-PARTC1  
 'Squatted'

(2.132) *u-t'uch-u-b'ahr*  
 3SG.A-squat-?-POS.PARTC  
 'The base of something where you put things', 'its seat'

(2.133) *k-u-t'uch-kin-t-ik*  
 INC-3SG.A-squat-CAUS-TR-PLN  
 'He sets it down on its base'

(2.134) *äk=tan*  
 seat=face  
 'In front (of)'

[exx 2.130-2.134, AChKY positionals PDLMA 2005]

A second participle suffix, *-b'ir*, is combined with a positional root in two ways, it can attach to the root directly, or it can take the form *-in-b'ir*. The difference between the

two forms of this participle has not been established and it may even reflect a dialectal difference. Both forms are exemplified below:

- (2.135) *t'uch-b'ir*  
 squat-PARTC2  
 'It is squatted'  
 [AChKY positionals PDLMA 2005]

- (2.136) *b'ihn ch'ik-in-b'ir*  
 FUT1 stand-?-PARTC2  
 'It was standing'  
 [060923 MChKY]

Lastly, some positional roots function as proper intransitive verbs with an added high tone, like middle voice transitive roots. This phonological change comes with an added semantic shift:

Positional:

- (2.137) *kur-uk-b'ahr*  
 sit-?-POS.PARTC  
 'seated' (crosslegged, like woman)

Intransitive verb:

- (2.138) *a-ch'iich'-o7 k-u-kuhr-ur*  
 DET-bird-TD.DIST INC-3SG.A-sit-PLN.IV  
 'the bird sits' (on a branch)

## 2.5 Chapter summary

In this chapter I have introduced the culture and history of the Lakandones, along with some of the persons that have assisted me in the present investigation. I have tried to situate this information by making occasional comparisons to Yukatekos and the shared history of the two populations. One reason for making such comparisons is that the following grammatical and semantic analysis in chapters 4 to 6 will make similar comparisons between grammatical features found in Yukatek and Lakandon Maya.

Although obvious, the grammatical description above is by no means complete. A more thoroughgoing account of e.g. syntactic operations awaits further analysis. Still, the grammatical introduction in this chapter together with the presentation and

discussion of AM-marking, deictic forms, and the particle word class in chapter 4, should provide a sufficient background to the ensuing analysis in chapters 5 and 6.

First, however, I turn to some theoretical issues aside from language description that are equally important to the investigation.

### 3. Theoretical background to time reference

In this chapter, the concepts of *time* and *modality* are discussed in order to prepare for the following, detailed analysis of the semantic features present in forms used for temporal reference in Lakandon Maya. From my own thinking about what *time* is and how it is reflected in the forms investigated for Lakandon, I believe the concept of *modality* must be explored alongside of *time* in order to arrive at an appropriate description and characterisation of time reference in Lakandon specifically, and in language more generally. The present chapter is therefore divided between the two concepts.

Section 3.1 is devoted to a definition of the concept of *time* as well as time in language, *tense*, and *event order*. Differences in the conceptualisation of time in linguistics and anthropology are compared and commented on by way of looking at the separate concepts and efforts that have been made to reconcile the two.

In section 3.2, *time* is explored by dividing the temporal concept into an A- and a B-series that appear to encompass both *linguistic*, *philosophical*, *psychological*, and *anthropological* time notions. Following this is a presentation of William Hanks' (1990) investigation of deixis in Yukatek, which has greatly influenced the research perspective chosen for the present investigation. Although Hanks' research on Yukatek is focussed on non-temporal deixis, he provides several observations with regard to time deictics in Yukatek. These comments are accordingly important to the interpretation of the time words investigated for Lakandon in chapters 5 and 6.

Section 3.3 takes a look at *modality* by presenting some already established suggestions for defining the concept, as well as taking a closer look at the concept/category of epistemic modality and how modality relates to time, especially with regard to expectation.

Section 3.4 introduces *participant perspective* as a tentative categorical distinction that has been investigated conceptually by several researchers under other names, e.g. *objectivity* vs. *subjectivity*, *personal* vs. *shared responsibility*, and *subjectivity* vs. *inter-subjectivity* (Lyons 1977, Nuyts 2001, Traugott & Dasher 2002).

#### 3.1 Time in linguistics and other disciplines

This section heading is motivated by the observation that descriptions of *time* are very different when one compares anthropological to linguistic investigations (e.g. Munn



1992 vs. Klein 1994). Initially, these differences made me wonder why two related disciplines viewed the time concept so differently.

Due to the fact that my aim with the present investigation is a grammatical description of time reference in Lakandon Maya as it can be seen from the perspective of the speech participants and the speech situation, it is motivated to tease the differences apart to understand the two perspectives better. The linguistic time concept is explored in 3.1.1 and the anthropological one is discussed in 3.1.2. Following their separate introduction is a look at an attempt to unify them in 3.1.3.

### **3.1.1 Tense and event-order**

A central issue for the present study is how the concept of temporality, or *time*, can be investigated linguistically. Event structure and event order expressed by means of aspect and tense is an area of research that has received a lot of attention in the literature (cf. Comrie 1976, 1985; Dahl 1985; Klein 1994; Bohnemeyer 1998) and it is indeed considered by many linguists to be the only area of interest for investigating time in language (e.g. Klein 1994).

The discussion below will not be devoted to a critical examination of tense as a grammatical category in language. None of the data from Lakandon – which I think is a tense-less language – has led me to postulate any additions or criticisms of linguistic theories of tense. Instead, I wish to focus on investigating time in language as it can be connected to other conceptualisations of *time* and thereby attempt to link the component parts of the time concept to the data and analysis pertaining to Lakandon Maya.

Because of this shift in focus, I will briefly present some of what has been said about time in language as a starting point for the following, somewhat deviating discussion.

The common way to provide a structure for event order and tense in language is to start with the conceptually familiar *timeline*. Events and time spans are placed along an open ended line, and depending on how an event is placed in relation to a point of reference, whether it is the time of utterance or simply another event, the event referred to is either in the past (preceding), simultaneous with the present (overlapping), or in the future (following). This division makes for a simple conceptual aid when getting to grips with the function and meaning of tense and event order.

### 3.1.1.1 The grammatical category of tense

Most, if not all, descriptions of tense start with Reichenbach (1947) who postulated three points of reference for tense: S – the point of speech; E – the point of event; and R – the point of reference. This three-way system has been criticised and modified by other researchers in subsequent investigations (cf. Comrie 1985; Dahl 1985; Klein 1994), but it still provides an illustration of the basic workings of tense. In most familiar tenses, the E- and the R-point coincide – the *past perfect* being an exception – and in the present tense the S and the E occupy the same place:

(3.1) I am reading right now.

(3.2) I read a book a few days ago.

In (3.1), S and E are simultaneous whereas in (3.2) E is situated before S. R and E are simultaneous in both.

Dahl (1985) prefers to regard the semantics of tense (and aspect) not in terms of meaning, but in terms of *use*. He discusses the use of tenses in terms of *impreciseness* and *prototype-theory*, which makes for a research perspective where features of the use of a certain tense marker may be regarded as either peripheral or central to that marker.

Given this view of the semantics of tense, the meaning/use of a certain grammatical element pertaining to time reference cannot be included or excluded depending on whether it possesses some feature or not. It is rather a question of degree. There are, however, some features that are important diagnostics for describing the focal properties of tense as a grammatical category:

- i) Tense is expressed by the choice of one of several possible morphological forms of the finite verb or the auxiliary.
- ii) Tense is semantically dependent on the relation between the time that ‘is talked of’ in the sentence and the time of the speech act.
- iii) Tense is obligatorily expressed, i.e. a choice between forms has to be made regardless of the presence of explicit time indicators in the sentence.

(after Dahl 1985: 24)

If a grammatical element that has a function in time reference lacks one or more of these properties, then locating an event in time is, perhaps, not its primary function. Instead, it could be that it belongs to another category such as aspect or mood, depending on what its more salient features are.

In connection to the three focal properties described above that are relevant to the diagnostics of tense, there are some very concrete test-questions that will determine if one is looking at a tense marker or not:

- Can the marker/particle that attaches to the verb-complex co-occur with an expression denoting a specific time? (i.e. is the event located at a point in time that can be explicitly stated?)
- Is the marker, and other markers with identical function (i.e. to locate an event in time) but with a different meaning, obligatory?
- Can E (i.e. the point of event) be dislocated with regard to S to occupy more than one position?

If the answers to the questions above are *yes-yes-no*, then there is a good chance that the marker in question is a tense marker. Variations of this matrix of answers will cast doubt on which category the marker belongs to. These questions partly paraphrase the ones above, but are (I think) more to the point. More will be said about tense and tense marking in Lakandon in section 4.1.3 where the same arguments are used to argue for the absence of tense as a grammatical category in Lakandon.

I wish to emphasise that the present investigation will not primarily be concerned with investigating the expression of tense and how this category relates to what is going on in Lakandon. I am more interested to look at time reference from a contextual and pragmatic point of view. I will demonstrate that, if the agendas and perspectives of the speech participants are taken into account, a different picture will emerge with regard to how speakers make temporally situated reference to events (see chapter 5).

### 3.1.1.2 Klein's Basic Time Concept

Wolfgang Klein (1994) introduces a concept he calls the “Basic Time Concept” (BTC), which consists of – in his opinion – all relevant properties connected to investigating event order relations. As a motivation for the need for the BTC, Klein states that he “do[es] not think there is a uniform concept of time at all” (Klein 1994: 60). He lists

*biological, physical, and Kantian* time concepts as examples of other layers of time that are irrelevant for linguistic description. Klein's interest lies in "the expression of temporal relations in NATURAL LANGUAGES" (ibid: 60). The BTC has seven features:

1. *Segmentability* – division of time into smaller segments, or *time spans*.
2. *Inclusion* – the possibility of two time spans being included in one another. This implies an "elementary topological structure" of time.
3. *Linear order* – if two time spans are not fully included in each other, one precedes the other
4. *Proximity* – two time spans may be either near, or far from each other.
5. *Lack of quality* – time spans have no qualitative properties like lexical contents do. This means ruling out notions like "cyclical" time. In essence time is only described in terms of temporal relations between situations.
6. *Duration* – time spans may be short or long in duration.
7. *Origo* – 'the time of present experience', everything *before* is accessible by memory, everything *later* by expectation. This is the basis for concepts like 'time of utterance'

(ibid: 61)

Klein's seven features give rise to a group of *characteristics* that formally define the BTC. They paraphrase the features themselves; 1) an infinite set of time spans; 2) an order relation on time spans; 3) a topological relation between the time spans; 4) for each time span *t*, a distinguished time span which includes *t* – the region of *t*; 5) a distinguished time span, the *origo*. According to Klein, these characteristics will suffice for explaining any expression of linguistic time.

Adhering to the features and characteristics of Klein's BTC, Jürgen Bohnemeyer (1998) investigates event order relations in Yukatek Maya. He argues that time words specifying event order are largely lacking in Yukatek and that such relations are implicitly stated using aspectuals in combination with order of mention and world knowledge. He also notes that a concept such as continuity, or continuation, is absent in a lexicalised form. Bohnemeyer shows that in Yukatek, the basic concept of event order is implicitly stated, i.e. non-lexicalised, whereas previously, time words expressing event order were proposed as a universal in language (cf. Goddard & Wierzbicka 1994).

Klein's "Basic Time Concept" should not be confused with a definition of the concept of *time* in a more general sense, as he states himself. It is true that biological and physical time are different from linguistic time, so it may be worth separating the various time-concepts from each other. However, to think that the BTC exhausts the semantic features and grammatical properties of time in language may also be a mistake. Biological and psychological time, for example, both influence the expression of time in language for the simple reason that language is used as a means of communication between biologically and psychologically conditioned beings, i.e. humans.

What Klein aims to define, specifically, are the properties of the grammatical category of *tense* and how that categorical notion can be transferred more generally to *event order*. There is, however, more to time in language than these two notions. Although the characteristics of the BTC are appropriate for its purpose, they are not critically examined in themselves. They leave questions unanswered that arise from the very features and characteristics that make up the BTC.

For example, what is the *origo*? If there is a distinguished time span, a focal point of interest, then what distinguishes it from other non-focal points in time? Klein could argue that the semantic properties of the *origo* pertain to the category of *deixis*, but this category can be said to have tense within its scope. Deixis and tense cannot well be separated which means that a concept such as the *origo* should be accounted for in any theory that attempts to define tense. Alternatively, it could be enough for Klein to simply regard the *origo* as the most common, or natural, point of reference in tense systems, giving the moment of utterance a special quality without going into detail about what that quality is. For the purposes of the present investigation, this is an insufficient answer.

Secondly, the fifth feature, "lack of quality", can only be applied to the grammatical expression of tense. To argue that time spans lack qualities in terms of adjectival notions such as "difficult" or "dangerous", is only a relevant point to make with regard to tense marking. It does not mean that time periods are without quality. The grammatical expression of a location in time (i.e. tense) may be unspecified for quality, but time spans and events are necessarily imbued with quality on more than one level. Time spans are only quality-less if they are measured by the time-line concept.

The use of time adverbs and particles to specify temporal location depends on a variety of parameters for their appropriate use. The time adverbs that are first on the list

in linguistic descriptions are usually *today*, *yesterday*, and *tomorrow*. These lexemes verify the timeline concept and are easy to define semantically only if they are measured against the timeline. There is however a wealth of other time words that defy easy description and that furthermore depend on pragmatic parameters to reveal their motivations. These time words are not outside of the time concept in language, nor do they belong to other domains such as biological or psychological time. The present investigation will be devoted to investigating such time words and answering precisely the questions; what distinguishes the origo from other points of reference and what are the qualities of time in language?

### 3.1.1.3 Metaphoric and Metonymic time

*Metaphorical* and (to some extent) *metonymical* uses of spatial expressions to refer to time is a typologically widespread notion that also has been quite extensively investigated (cf. Alverson 1994; Fillmore 1997; Haspelmath 1997; Lakoff 1987; Lakoff & Johnson 1999, among others).

A common feature in many languages is for spatial deictics, i.e. demonstratives, to serve as a basis for metaphor in the temporal domain, e.g. *at this time* (Diessel 1999; Anderson & Keenan 1985). It is common for temporal adverbs such as *now* and *then* to be derived from adverbial demonstratives, and unusual for a language to have temporal deictics that are completely independent of the demonstrative system of space (Diessel 1999: 140). This is, for example, illustrated by what Peter Austin (1998) reports for a number of Aboriginal Australian languages, some of which have both temporal adverbs/demonstratives *and* inflectional verb-markers modelled on spatial counterparts.

George Lakoff and Mark Johnson (1999) map the semantic properties of linguistic time by investigating the spatial and non-spatial metaphors we use to refer to time in English. One important semantic feature of time is that *time* equals *events*. This represents a metonymical process since time is impossible to separate from events. It is, of course, time that is metonymically mapped onto events, since events are “concrete” and “real” in some sense whereas time is abstract and intangible. Time is directional and irreversible because events are directional and irreversible; events cannot “unhappen”. Time is continuous because we experience events as continuous. Time is segmentable because periodic events have beginnings and ends. Time can be measured because iterations of events can be counted (ibid: 138).

A familiar metaphor associated with expressions of time is “the Time Orientation Metaphor”. In this metaphor, the location of the observer is the present, the space in front of the observer is the future, and the space behind the observer represents the past (ibid: 140). In some languages, this orientation can be reversed, with the future behind and the past in front, but regardless of which, a basic orientation with respect to an observer still applies.

Below is a quote that illustrates the authors’ view on the semantic properties of time in language both with regard to metaphoric and non-metaphoric features of time:

“As we have seen, the literal aspects of time such as directionality and irreversibility arise from the fundamental characterization of time as a comparison of events, where time-defining events are regular and iterative. Nonetheless, *we* create the concept of time and conceptualize events naturally and unconsciously as occurring *in* time or *at* times. And we have no choice in the matter. All of us automatically do this because we have human bodies and brains, just as all of us “see” color categories as being in the world because we have human bodies and brains.

[...] time is cognitively constructed by two processes, one metonymic (based on correlation with events) and one metaphoric (based on motion and resources). From a cognitive perspective, events and motion are more basic than time.[...] The *directional*, *irreversible*, *continuous*, *segmentable*, and *measurable* character of events is imposed upon time by time-defining events (ibid: 167).

Including metaphorical and metonymical aspects of linguistic time in the discussion is motivated by the analysis of the Lakandon data in chapter 5. For instance, Diessel’s and Anderson & Keenan’s observations regarding the use of spatial demonstrative forms to serve in time reference is in agreement with the present investigation. Deictic elements that are used with locative, ostensive, and nominal reference also have a use with time deictic forms.

Metaphor and metonymy has another function in Lakandon time reference than the one discussed by Lakoff & Johnson. Corresponding to how time is referred to in terms of space, other semantic parameters present in Lakandon time words (see section 1.2, above) are referred to using a temporal framework. Such time metaphors will be discussed in more detail in section 5.6.

### 3.1.2 Anthropological time

Anthropological investigations of time have generally focussed on the *socially constructed* concept of time. *Time* as a “socially constructed entity” originated with Emile Durkheim (1915) who saw time as a “principal category”, like space, inseparable from the things that it is connected to. Time is according to Durkheim entirely a social construct and thus derived from social life (Gell 1998: 9).

Many anthropologists have proposed a division of time into two opposing concepts. Evans-Pritchard (1939) distinguished between *ecological* and *structural* time, which essentially is a division between *practical* and *ideological* time. Ideological time is only relevant within certain symbolic frames of reference, exemplified by genealogical reckoning which traces the ancestors of a person back in an ordered sequence. Practical time is less investigated but is represented by the naturalistic solar, lunar, and ecological cycles.

Leach (1961) makes a division, between *repetitive processes* or cyclic time and *irreversible changes* such as the birth and death of a human. Religion or society, according to Leach, constructs the cyclicity of time to counter the finality of death which is an undesirable feature of the universe as portrayed in religion.

Cyclical time, in essence, means a re-occurrence of the “same” time periods and an absence of an absolute beginning and an end. This has been suggested as the basis for time reckoning in every culture (Aveni 1989) since it reflects the seasons and the natural patterns in animal and plant life. The Western-European (linear) time concept also has some elements of circularity. The months, weeks and days all come back at regular intervals, but on the other hand, Monday the 23<sup>rd</sup> March 2004 will never return unless we start our time reckoning over entirely with the year 1, for whatever reason, and then wait for 2004 years.

This is what has been proposed for the Mesoamerican calendar where one “count” (i.e. 52 years for the Aztecs), ends only to be continued by the same count again. For Aztec time reckoning, it is therefore impossible to know a historical date from calendar information alone, but inference must be made from the succession of kings and other historical events to pinpoint which cycle a recorded date belongs to (cf. Smith 1996). This has been a basic argument for cyclical time with regard to any pre-Columbian people that used a version of the Mesoamerican calendar.



Barnes (1974) has proposed a cyclical structure of time in his study of the Kedang of Indonesia. According to Barnes, cyclical time is not conceived of as a circle or visualised metaphorically, but only contains a schedule of repeatable events, which have to be anticipated. Cyclical time is not the denial of time's irreversibility but is designed to prepare the Kedang for real events. In rituals connected to the death of relatives, the Kedang make sure that a person stays dead in an irreversible way and does not become part of the cyclicity of their own lore.

Gell (1998) argues, as a response to claims such as the one promoted by Barnes, that "the idea of cyclic time to the ethnographic Other" arises because the anthropologist needs to rationalise the Other's behaviour. According to Gell, world-renewing ceremonies connected to a cyclical world view, would be useless if time was cyclical, since the world would return to its origin anyway, with or without the ritual (ibid: 12).

Cyclicity is further discussed by Geertz (1973) who calls the Balinese "detemporalised". Cyclicity is found in the kinship and naming system, with living persons being socially identified with their same-sex grand parents and regarded as these individuals reborn. The Balinese calendar is according to Geertz another argument for cyclicity with each day being ascribed a unique character so that time is read *qualitatively* and non-progressively.

The propositions by Geertz have in turn been criticised for seeking to polarise the Balinese calendar with our own and to confuse ritual ideology and practical cognition (ibid: 14).

A division between *ideological time* and *cognitive time* as a variant of the structural-ecological split has been put forth by Bloch (1977). He argues that ideological time is constructed by authoritative institutions in a society to "mask" reality. Ideological time in Balinese society, is constructed to stem the questioning of authority and the induction of social change. Cognitive or practical time comes from experience and ideological time from ritual dogma and performance. Cognitive time is biological and ideological time is arbitrary. Bloch also makes a division between cyclical (ideological) and linear (cognitive) time to further separate the two time concepts with regard to the conceptual shape of time.

Nancy Munn (1992) supports such views and proposes that dates and calendars in general are more qualitatively than quantitatively oriented, as they primarily keep track of the appropriate actions of a certain time, rather than being used quantitatively to

measure the temporal distance between two time periods. The most important qualitative trait of calendars and time-keeping in general is its function as a tool of power and control. As argued by Bloch, promoting a cyclical view of time is connected to the preservation of political conditions, since power structures can be validated in a society on the grounds that the calendar warrants their existence in only allowing for a repetition of the past to ensure a continuation of the present conditions.

A final division of temporality proposed in anthropology is between time as it is naturally experienced in pre-industrialised societies, and life according to the clock in modern society. Bordieu (1963, 1977) studied the Kabyle of Algeria who live according to the ritual calendar and the cycle of agricultural operations. For Kabyle peasant farmers, time is specified by other social conventions than the clock: "Intervals of subjective duration are not equal and uniform [...] reference points in time are qualitative nuances, equal to experiences" (Bordieu 1963: 59-60 in Gell 1998: 16). The central feature of time in Kabyle society is a presence of the past and the future in the present. Bordieu argues that this is a diagnostic feature of time outside the orbit of capitalist production.

Somewhat in contrast to the above discussion are the ideas of Anthony Aveni (1989) who argues that the major difference in the Western-European understanding of time from that of Pre-Columbian Mesoamerica, or ancient China, which both are considered to be cyclically time-oriented societies, is that we as humans are left out of the picture. Time is meaningless. Regardless of what we do, we are convinced that time will proceed, with or without us: "The cosmic myth told by modern science offers humanity as indifferent an ending as beginning. We emerge as the great nonparticipants who have no influence on the outcome" (Aveni 1989: 330). Perhaps cyclicity can only make sense if humans have some form of influence over the motion and progression of time by means of ritual action.

### **3.1.3 Linguistic-Anthropological time**

There have been attempts to link linguistic time with the temporal concepts of anthropology, the most notable of course being Benjamin Lee Whorf's (in)famous articles and essays on time for the Hopi Indians of Arizona (Whorf 1956). His claims concerning the distinction between "manifest" and "un-manifest" as central concepts of temporality in Hopi, along with Hopi's lack of spatio-temporal metaphor and tense, have been severely criticised and ridiculed for being unfounded and outright wrong (cf.

Malotki 1983; Pinker 1994). The reasons for the critique are quite clear considering the approach of the researchers who represent it, and it is partly the result of an argument carried out on two distinct levels with an added imbalance in the discussion since one of the articles in question was published posthumously.

How can anthropological, or the socially dependent construction of time, then be investigated linguistically?

Hoyt Alverson (1994) argues that the use of collocations and metaphors in language to refer to time, tells us something about the conceptual properties of time in culture: "collocations reflect cultural patterning in the use, acquisition, and transmission of language, so they reflect the cultural patterning of knowledge, situation, and purpose, of which language is always, at least tacitly, expressive" (ibid: 44). As such, "collocations directly reflect and index culture history" (ibid: 45). Alverson collects collocations and groups them together into five categories to argue for a unified, "pan-human" time concept in a case study of four languages<sup>23</sup>. Essentially, the conclusion is that time is understood in terms of space: "...in collocation, "time" comes to have quite naturally, unproblematically, and inherently the experiential properties of a spatial template" (ibid: 133).

The conclusion Alverson presents is that time is: 1) a partible entity, 2) a causal force or effect, 3) a medium in motion, 4) a course, and 5) an artefact of ascertainment or measurement (ibid: 129). These are all features conceivable in terms of spatial metaphor, but the problem is that they show conformity across the sample because that is what Alverson was looking for in the first place. The interpretation and choice of data that Alverson discusses is crucial with respect to his results.

The methodology used in eliciting the collocations and interpreting them necessarily determines what the results are going to be. The problem with comparison across cultures and languages, although valuable in some ways, is that it pushes the available semantic and conceptual possibilities of a language to the sidelines in search for sometimes preconceived elements that one hopes to find in order to make comparison possible. Alverson admits that ideally, a bi-lingual native speaker of the language under investigation would go into the field to collect collocations about time in everyday speech to make possible a more fine-grained analysis.

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<sup>23</sup> The languages under investigation are English, Mandarin, Hindi, and Sesotho (South-Africa).

The main problem with Alverson's investigation are the interpretations assigned to the gathered collocations. For example, one of the categories established by Alverson, namely 'time as a partible entity', contains translated expressions from Mandarin (ibid: 70-71) such as 'lifetime', 'farming time', 'tilling time', 'planting time', 'auspicious day', and 'suitable time'. These could just as easily be labelled, 'the characteristics of time', or 'time has meaning/characteristics'. The corresponding data from American English *in the same category*, emphasise very different ideas, namely "spend time", "kill time", "save time", and "plenty of time". To me, this suggests that "characteristics/qualities of time" is grouped together with the metaphorical concept of "time as a resource" (see Lakoff & Johnsson 1999). The category of "time as a partible entity" was checked against, and approved by American students who had no familiarity with either Chinese culture or the Mandarin language. The labels chosen reflect the initial hypothesis and the cultural background of the researcher and serve to illustrate the strong, but preconceived, tendency in language to use a spatial template in the description of time. As an in-depth analysis of the possible semantics of time, however, it is not very well designed. Another problematic issue is that the study claims to be a quantitative investigation with ideas rooted in cognitive grammar (Langacker 1987), when in fact the analysis and evaluation of the data is entirely impressionistic and arbitrary.

Alverson's also suggests that the conscious philosophical time concept that contains variation and difference between cultures (e.g. circularity, linearity), draws from the way everyday reference is made to time and periods of time, using the same universal categories of metaphor and collocations. This sounds reasonable, but I fail to see these "philosophical concepts" expressed in the collocations provided as "raw" data.

For instance, in American English, the notion of a time period as being 'ahead', 'behind', 'in front', 'before', or 'looking ahead', 'looking into the future', 'go forward in time', etc. (also found in Mandarin, Hindi, and Sesotho), only indicates a back-front orientation with regard to an observer. There is no inherent linear structure to objects being placed behind, or in front of an observer in space. The suggestion that time periods are linearly ordered is a conceptual device to describe event order that originates in the Western scientific and philosophical tradition (see chapter 1; section 3.1). The argument that linearity is a fundamental semantic category across languages is not supported by Alverson's data.

To linguistically investigate the conceptual and philosophical properties of time, means looking at elements that are somehow encoded in the grammar of the language. For a cyclical concept of time to be relevant for a linguistic description, cyclicity must be part of the grammar, semantically, lexically and/or morphologically, which of course is something that applies to linear time and other time concepts as well. If temporal concepts are investigated that are *not* found to be pervasive notions and structurally salient in language, then the investigation is not linguistic anymore.

### 3.1.4 Discussion of linguistic and anthropological time

The investigation of the semantic properties of *time* from a perspective of language use is what concerns the present investigation. Hopefully, some of the difficulties with interpreting data that I have pointed to in Alverson's investigation (section 3.1.3, above), will be ameliorated by working with first-hand language data and native speakers in a field work situation.

The picture that emerges from the survey of linguistic and anthropological time above, illustrates a difference in perspective that can be summarised as consisting of an opposition between *cognitive* and *social* conceptualisations of *time*. In discussions of anthropological time, a two-faced concept emerges where one is the "commonsensical", everyday experience of time and the other is made of socially conditioned ideas about time and religion. As we have seen in section 3.1.2, anthropologists have generally chosen to investigate the latter concept.

The linguistic time concept, on the other hand, chooses the former concept in order to see how its features map onto grammatical categories such as tense, in language. In doing so, linguists exclude entirely the idea of socially conditioned time as a part of grammar and language use in favour of a structurally simpler picture that matches the linguistic structures of (mostly) Western European languages.

Alverson's attempt to investigate socially constructed notions of *time* from the point of view of linguistic constructions is not convincing, neither with regard to the methodology employed, nor the results presented. Despite this failure, I am convinced that socially conditioned time *is* visible in the grammar of language and that it can be investigated by using the proper means. Such an investigation requires extensive fieldwork; a large corpus containing examples that can be properly commented on by speakers of the language in question; a familiarity with the culture of the speakers; and a

context-sensitive research perspective that takes into account pragmatic parameters of meaning in addition to the encoded ones, *and* the ability to separate the two.

Fortunately, all these requirements are present in the present investigation. I can therefore confidently say that the problems of interpretation and the methodology that Alverson's investigation of pan-human time suffered from, are replaced by a research perspective and a methodology that will allow a fair picture of time reference to emerge with respect to the use of time deictics and the way the use and meaning of those expressions reflect the socially conditioned considerations of the speakers in making reference to past, present, and future events.

### **3.2 Time deixis**

Time deixis expresses temporal relations that can only be understood from the context where they occur, i.e. with regard to the person making an utterance and the immediate context in which he makes it. Words like *now*, *then*, *soon*, *a while ago*, *before*, and *later*, are examples of deictic time words, the corresponding Lakandon Maya terms of which are central to the present investigation.

In discussing time deixis, Stephen Levinson (1983) provides a concise definition of the topic: "Like all aspects of deixis, time deixis makes ultimate reference to participant-role [...] *now* can be glossed as 'the time at which the speaker is producing the utterance containing *now*'" (ibid: 73). Following this initial definition, Levinson adds: "We can improve on our previous gloss for *now*, by offering 'the pragmatically given span including CT' [i.e. 'coding time' as opposed to RT; 'receiving time']" (ibid: 74).

There is, as we will see, more to the meaning of *now* than relating it as a time span to a person making an utterance. The meaning of *now* depends to a high degree on the properties of the speech situation where the utterance is made, including the expectations that the speaker has of the other speech participants, most notably the addressee.

The central question to investigate is in what way the socio-cultural context determines the use of deictic time words. What meaning is conveyed in these forms and how does the setting, or the context of the utterance with regard to temporal reference, influence the forms used to denote a deictic instance of time? What does the "the *pragmatically* given span including CT" consist of?

Levinson discusses for English, a classic example originally provided by Fillmore (1971, 1975) where the use of *next Thursday* can indicate the Thursday of the same week; the coming Thursday of the following week; or whichever Thursday follows CT, all depending on when the utterance is made. If it is made on Wednesday, then because of the existence of the deictic word *tomorrow*, the Thursday of the following week is implied. The ambiguity of *next Thursday* is because of the existence of *tomorrow*, only present on a Monday or a Tuesday.

Although a telling example, again, this example clearly reflects the preference for investigating event order relations, while there are many other pragmatic parameters that may influence the use of certain time words to an equal degree.

In the following sections, 3.2.1 and 3.2.2, two important pieces of the puzzle will be added. These two pieces will make possible the analysis and discussion that follows in chapter 5 and 6. First, is an introduction to Husserl's phenomenological time concept followed by a presentation of William Hank's investigation of deixis in Yukatek Maya.

### 3.2.1 A- and B-series time

The situation we face is one where there is more to say about time in language than tense theory allows, and still we wish to keep our discussion within the boundaries of linguistic research, i.e. investigating concepts of *time* and temporality that are visible in language and relevant to linguistics. To meet this challenge we turn to a related discipline of linguistics, namely philosophy<sup>24</sup>.

Alfred Gell (1992), following Husserl (1966), investigates the time concept by dividing it into an A- and a B-series. The A-series represents the "past-present-future" aspect of time in a way that corresponds to the *perception* of time by the individual. The B-series constitutes the "before-after" concept and equals event order and relative time as it is connected to dates and calendrical concepts. A-series time explains experienced, deictic time and it is also referred to as "tensed" time, since it primarily concerns the relation between the present moment (i.e. moment of utterance) and a past or future event.

B-series time is absolute in the sense that it represents "true time" as it must be in the "real world", where everything has a date. A date is of course more than a date in a

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<sup>24</sup> Borrowing concepts and ideas from philosophy and bringing them into linguistic research is of course not a novel idea (see chapter/section 1, above). A cross-disciplinary retrieval of ideas has given rise to tense theory (Reichenbach 1947) as well as being highly influential on the formation of several theories of semantics and pragmatics.

calendar, but any configuration in the world that can be related to a temporal instance regardless of its relation to the position of the speaker, or the origo. Such configurations are likened to structures in a landscape that can be mapped out and situated with respect to other structures in the landscape.

Time does not flow in "the real world" as it is represented in B-series time. Turning back to A-series time, it is only the result of the perceptual faculties of conscious beings such as ourselves for whom present experience, (see Husserl 1966) results in what we experience as the flux of time. To explain this continuity, Husserl introduces two concepts, *retentions* and *protentions* that are fundamental to explaining the experience of "now".

Retentions are very recent memories that help us maintain a sense of continuity in present experience. Without retentions, a continuous event such as a wave rolling onto a beach would be experienced as a series of separate events instead of as one whole. Protentions also play a part in experiencing the present since they prepare us for a likely continuation of an experienced event. A protention may or may not be realised, but it is absolutely fundamental that we form expectations about the immediate "future-present", because otherwise we would be forever surprised by how events unfold, even the most mundane ones.

"[R]etentions and protentions make up the horizon of the temporally extended present" (Gell 1992: 223). This is a formulation that does away with the idea of the perceived "now" as somehow being a knife's edge that moves along the arrow of time, out of the past and into the future.

Perceived time also allows for time to slow down, speed up, or stand still, all depending on the activities and the state-of-mind of the experiencer. Although all the different qualities of time a person can experience are largely subjective, they also carry an inter-subjective quality since the psychological unity of people allows them to relate to an individual's inner experience of time since they all share the same type of experiences, however not simultaneously.

A-series time constitutes more than a mere topological, i.e. before-after relationship, between the speaker and an event or state. It is closely connected to personal memory and subjective experience and allows for both revision and modification. Linguistically, this has some consequences when it comes to mapping the semantic content of deictic time words and how they relate to context, genre and the



speech participants. This mapping is central to the present investigation and is discussed at length in chapter 5.

The time-concept relating to B-series time is that which we use to coordinate social activities, but at the same time it also determines when a certain activity should be performed. The aforementioned dates of B-series time are connected to real-world structures such as the movements of the sun and the resulting conditions in our environment, which naturally are the very processes humans live by. Again, according to Gell, B-series time is separate from human perception and consciousness, but it is at the same time inexorable from human activity and existence in the world.

The imagined flow of experience (A-series time) is paired with the absolute dates of the B-series to form a coherent picture of time as a complete concept. No detection of movement (A-series time) is possible if there is no background (B-series time) to view it against.

A- and B-series time is, as stated above, a phenomenological theory and is as such not obviously related to grammar and language use. I am convinced, however, that it is a conceptual division that has every bit of relevance for a discussion of time reference in language and that it serves an important function for interpreting the Lakandon data with respect to how deictic time reference is made. An investigation of time in language can probably not reveal anything about the true nature of *time* (whether that would be A- or B-series time or a combination of both), but it can say something about how people talk about it and how it is imposed on the world of human affairs and human actions, including speech-acts. The division of *time* into the A- and B-series, accounts for socially conditioned time in two distinct ways, which of course at the same time are intimately connected.

### **3.2.2 A theory of referential practice**

In a landmark investigation of reference and spatial deixis in Yukatek Maya, William Hanks (1990) uses an anthropological perspective in the study of language use and argues that reference in language is grounded in the socio-cultural practices of its speakers. Hanks treats speech as social engagement and reference as a practice that functions to orient speakers in the world. Hanks carries out his investigation using methods from the fields of anthropology, pragmatics, sociology and cognitive semantics.

The focus of Hanks' investigation is on the use of forms belonging to *spatial*, *ostensive*, *nominal*, and *person* deixis in Yukatek. The investigated forms have meaning distinctions that, among other things, allow speakers to make salient reference to objects and persons in a way that stands in direct relation to how they organise their everyday lives with regard to the workplace, the household, their personal space, and how others are expected to respond to these divisions. The methodology allows for an analysis of the cultural practices of the speakers alongside language use that accompany, and to some degree, constitute these practices (see also section 4.4.1).

Hanks' framework for investigating deixis in Yukatek and the way that framework can be applied in the present investigation is presented in detail in section 5.1 where some of the necessary assumptions and conditions for the investigation of time deictics in Lakandon Maya are stated and discussed.

Without getting too much ahead of myself, I will discuss some of Hanks' arguments regarding time deixis in Yukatek here. He supplies several observations concerning time reference in discussing the general make-up of deixis and deictic reference in Yukatek and argues that every paradigm-set of deictic forms in Yukatek has a *core dimension* that most saliently describes the main function and meaning of the forms in the set. For locative deictics the core dimension is *space*, and for temporal deictics it is, according to Hanks, *relative time*, or time relative to the moment of utterance. He comments that temporal deictics make up a large and quite irregular category in Yukatek Maya and that they pose numerous problems of interpretation and therefore should be an independent subject of future study (Hanks 1990: 21).

Hanks lists several deictic time expressions<sup>25</sup> that are constructed with morphological elements investigated for spatial deictics, most prominently the terminal deictic forms (-a7, -o7, -e7, -b'e7, -i7). Among the listed expressions are: *walakil(-a7)* 'this time'; *b'ejoora(-a7)* 'now, presently'; *beje7la(-e7)* 'nowadays'; and *tolakjeak-o7* 'back then (shared distant past)'. The meanings attached to the terminal deictics in the temporal domain are identical to the ones of other domains of deixis, suggesting that the methods of investigation used for deixis more generally apply to the deictics of the temporal domain.

There are also other elements "borrowed" from the forms used to make reference to space, perhaps most visibly so in the form *tolakjeak-o7*. From the component parts of

<sup>25</sup> Hanks uses a slightly different orthography from my own, which means that I have adjusted it to match the orthographic conventions found in the rest of the investigation: /h/ → /j/; /ʔ/ → /7/; /'VV/ → /Vh/.

*tol-akjeak-o7* it is evident that *tol-o7*, which is the (locative) *exclusive regional* deictic form, has been imported into the set for time deictics. From the presence of this form it is suggested that *inclusion* and *exclusion* could be relevant for the definition of temporal reference by means of deictic forms, given the spatial origin of *tol-o7*.

However, although there is a form denoting a shared, distant past, or “a stretch of time typically prior to the day of utterance and recalled by both interactants” (ibid: 21), this form (i.e. *tol-akjeak-o7*) is not contrasted by an expression where a past time is *not* recalled by both interactants, thus leaving open the question as to whether there are symmetric sets of forms that correspond to the ones available for locative and ostensive reference (see section 4.4).

Another, rather obvious, semantic feature of time deictics that also can be found in the spatial dimension of reference is *immediacy* (see section 4.4. for *te7la7/te7lo7*). Immediacy as a relational value in time deictics is suggested by two expressions roughly meaning ‘now’, namely *b’ej7oora-a7*, ‘now’, starting at the time of utterance and anticipating into the proximate future, and *b’eje7ela7(-e7)*, which also means ‘now’ or ‘today/nowadays’, referring alternatively to a point in the very near future, to the day of utterance, or more vaguely to ‘these days’ (Hanks 1990: 21).

However, as for *tolakjeako7*, one can only really make a good argument for a transfer of a semantic feature such as *immediate* between domains if the paradigmatic opposition *immediate/non-immediate* is also transferred. Although a similar opposition probably is present in Yukatek, Hanks does not follow through by providing such a form. In my opinion, it must be *ka7ch*, ‘previously, before’ that provides the *non-immediate* contrasting form.

Hanks has the following things to say about some of the general organising principles of time reference in Yukatek Maya, making comparisons to forms belonging to other dimensions of the system for deixis. In the quote below, he is referring to the “inclusion relation” of *te7la7/te7lo7* within the egocentric regions denoted by the forms *waye7* and *tolo7*:

“Similarly, the segment of time referred to by *b’aje7la7e7* ‘today, nowadays’ always includes the more restricted times of *sahmej* ‘earlier the same day’, *tahnt e7* ‘just (immediately prior in the same day)’, and several other temporal deictics. These inclusion relations cannot be captured in markedness terms, since the more inclusive forms are not used for the less inclusive ones.” (ibid: 61)

As we will see, this “inclusion relation” is not central to understanding the use and meaning of the time words analysed in chapter 5. Although the quote reflects a commonsensically valid observation, it is not of great value to understand e.g. how *sahm* (‘recently’) and *7uhch* (‘before’) are related semantically and pragmatically in Lakandon.

Including the forms used for time reference, Hanks concludes that, “Maya deictics are organized by a combination of *paradigmatic oppositions*, such as Immediate/Non-immediate; relations of strict *inclusion*, such as ‘a while ago’ and ‘today’; *sequential relations*, such as ‘yesterday, today, and tomorrow’; *rank order relations*, such as the perceptual features; and some others that will be introduced in the course of detailed description.” (ibid: 62 [my italics])

While it is clear that Hanks believes that the analysis he promotes for non-temporal forms of indexical reference also is relevant for the description of time deictics, many of the forms discussed by Hanks are not attested for Lakandon Maya, which makes a straightforward comparison between the two languages difficult. Although *b'ejē7ela7(-e7)* has a cognate in Lakandon in *b'aje7/b'ejē7*, the temporal features that Hanks provides for the former expression in Yukatek appears secondary to the ones I discuss in chapter 5 with regard to knowledge asymmetry and the participants access to experience and events. From a pragmatic perspective, information on how, when, and why utterances containing *b'aje7/b'aje7* are made, and what effect they have on the addressee is central to temporal reference in Lakandon. It is also key to revealing the conveyed and encoded meaning of the form. Such information is largely lacking in Hanks' investigation given that his focus remains with other semantic dimensions of deixis (but see sections 5.5 and 6.4).

As discussed above in section 3.1, and as copiously noted in the linguistic literature, the metaphorical use of spatial expressions to denote time is widespread and commonplace in most languages. This is also noted by Hanks for Yukatek, where central domains of activity are connected to the specific use of certain spatio-temporal deictic expressions.

The use of spatial deictics to denote deictic time is motivated by the everyday activities of the speakers. This is illustrated in several places of Hanks' investigation: “In the discourse sequence of the prayer, the lower spirits are cited **before** the higher ones, making it appropriate for their offerings to lie **in front** of the space” (ibid: 373). A parallel is drawn to the linguistic elements used in such discourse; (*yáax*) *táanil* means

both 'in front', and 'before' or 'earlier'. *páachi ti* means 'behind', 'after' and 'later' (ibid: 394).

Patterns of succession are also to be understood in terms of temporally imbued space. The construction of space is made stepwise in an ongoing work process, placing the anticipated product of the work within a temporal process: "The synchronic unity of a schematically whole place is derived from a diachronic sequence of movements, which itself anticipates later outcomes in the agricultural frame space. This is the reason we are forced to view them [agricultural frame spaces] as spatiotemporal productions rather than as fixed spatial objects" (ibid: 388).

Conversely, the terms used to describe the phases of development in the milpa are also used to denote the place itself. Hanks gives the example where someone saying that he is going to his "old stalks" (*xla' sáakab*), thereby indicating both the temporary state of his milpa and the actual place of his destination (ibid: 393).

Frames such as ritual and work procedures for farming confirm that: "the conceptual relation of successive points in a fixed sequence is one of the basic schemata in Maya spatiotemporal orientation" (ibid: 61). Hanks develops this topic by discussing the analogies existing between space and time: "phasing and rhythm of succession among spatial units, as in the development of domestic or activity space, temporalizes it. At the same time, it reinforces the analogical potential of spatial descriptors for temporal reference, and vice versa" (ibid: 380).

Following these statements, the metaphorical use of expressions such as *táanil* ('in front'), *páachi ti* ('behind'), and *'ichil* ('inside', 'during') is motivated by their function in discourse connected to specific frames of activity. Therefore, a metaphorical distinction between the two meanings appears less meaningful. From a language specific perspective, it would be more appropriate to label *táanil*, *páachi ti*, and *'ichil* instances of metonymy, since the use of these expressions inherently refer to both a place and a time.

However telling Hanks' observations are concerning the metaphorical mapping of spatial concepts onto temporal ones, they mostly serve to illustrate only one aspect of time in language, namely the B-series concept. A-series time, as discussed by Gell, is most likely not concerned with a spatial template because of its subjective nature. Semantic features of *attention*, *perception*, and *memory*, are better candidates for forms used in acts of temporal reference to events that primarily relate to the memory and knowledge of the speaker.

While it is clear that Hanks provides interesting and suggestive pointers as to the analysis of time deictics in Yukatek that could be transferred to an investigation of cognate forms in Lakandon, he also stops shy of actually implementing his methods and interpretive strategies used in the rest of his investigation with respect to the listed time words and expressions.

After having had a look at some of the definitions and notions belonging to the time concept, both from the point of view of linguistics and anthropology, it is now time to turn our attention to a related concept that has some bearing for the analysis in chapter 5, namely *modality*.

### **3.3 Modality: a definition**

The concept of *modality* is of course closely connected to temporality for the same reasons that make mood and tense interact. Modality is usually categorised into two separate kinds (Lyons 1977; Palmer 1986); one is called *deontic* and the other *epistemic*. Deontic modality expresses *obligation*, *necessity*, and *ability*, while epistemic modality is the *speaker's evaluation* of some state of affairs. This is a somewhat simplified picture that has been challenged and modified by several researchers, but the separation into deontic and epistemic modality is enough for the present purpose (for a summary of the various divisions of modality, see Narrog 2005).

#### **3.3.1 Epistemic and deontic modality**

Epistemic modality is defined in Nuyts (2001) as “(the linguistic expression of) an evaluation of the chances that a certain hypothetical state of affairs under consideration (or some aspect of it) will occur, is occurring, or has occurred in a possible world which serves as the universe of interpretation for the evaluation process, and which, in the default case, is the real world (or rather the evaluator’s interpretation of it [...])” (Nuyts 2001: 21).

Phrased in somewhat simpler terms; “epistemic modality concerns an estimation of the likelihood that (some aspect of) a certain state of affairs is/has been/will be true (or false) in the context of the possible world under consideration.” (ibid: 21). Epistemic estimation ranges from *certain* to *possible*, to *doubtful* with a number of possible intermediary positions.

Bybee et al. (1994) provide a similar definition: “[e]pistemic modality applies to assertions and indicates the extent to which the speaker is committed to the truth of the

proposition.” They add that, “[t]he commonly expressed epistemic modalities are *possibility*, *probability*, and *inferred certainty*.” (Bybee et al. 1994: 181)

Epistemic modality is one in a group of several “qualifications” (Lyons 1977) that include other proposed forms of modality, such as *deontic*, *dynamic*, and *facultative*, but also grammatical categories such as *evidentiality*, *tense*, and *aspect*.

Deontic modality, on the other hand, is according to Nuyts an evaluation of the moral acceptability, desirability or necessity of a state of affairs. Deontic modality is also called “agent-oriented” as opposed to the “speaker-oriented” epistemic modality (cf. Bybee et al. 1994). Nuyts, on the other hand, argues that there are elements of both agent- and speaker orientation in deontic modality, which is why the terms agent- and speaker-oriented modality may not be ideal. He thinks the term agent-oriented should be reserved for other kinds of modality (Nuyts 2001: 25).

Another suggestion for categorising non-epistemic modality is found in the term “root modality”, which basically is taken to mean deontic modality (but sometimes also including other kinds). A strong argument for separating deontic from epistemic modality is the completely speaker-oriented nature of epistemic modality.

### 3.3.2 Shared features and differences

Many accounts of modality argue for one type of modality as basic, and the other as derived thus making the derived one analysable in terms of whichever is the basic modality. Most researchers posit deontic modality as the basic category (cf. Narrog 2005 for a summary) while some argue that a reverse development is possible in some cases (ibid).

The development from deontic to epistemic can also be seen as a manifestation of *subjectification* as an important process in language change (Traugott & Dasher 2002). The topic of subjectification will be discussed in the following sections, as it has importance for the results of the investigation as a whole.

Winter (1994) develops the concept *force dynamics* (Talmy 1988) into the related concept of *social power* to explain the cognitive underpinnings of both modalities. He does this in an attempt to give a unified account of deontic and epistemic modality from a socio-cultural perspective. The components of the social power concept are *power relations* between actors and *expectations* regarding the attitudes of the speech participants with respect to some event or action.

In Winter's account, the deontic meaning is basic and the epistemic follows from *pragmatic strengthening*, a concept borrowed from Traugott (1989). That way, evidence can be viewed as a power on its own, which forces the speaker to make conclusions about some state or event.

The asymmetries in power between the speech participants is more directly visible in deontic modality, but the same mechanism is consequently also present in epistemic modality by treating evidence as having power over the speaker. An important difference between the two is that deontic modality refers to *actions* while epistemic modality always refers to some *state of affairs*.

The second motivation for the use of modality markers is, according to Winter, the expectations regarding the attitudes of the speech participants. Three layers of expectations/attitudes between the speaker and the addressee are identified by Winter:

- i) the speaker's attitude towards *p*
- ii) the speaker's expectation about the hearer's attitude towards *p*
- iii) the speaker's expectation about the hearer's expectation about the speaker's attitude towards *p*

Speaker expectations about the perspective of the hearer are of course not exclusive to the category of modality. They are on the contrary pervasive throughout language and constitute a strong argument for disqualifying logic as the sole analytical tool to understand linguistic structure (cf. Givón 1982, among others).

Winter argues that regardless of the power relation between the speech participants, the attitudes of the speaker and his expectations about the attitudes of the addressee will always be present as a motivation for the use (and choice) of modality markers. This conclusion is not widely accepted; especially not by researchers who wish to define epistemic modality as a distinct category, separate from deontic modality (cf. Nuyts 2001).

The disparity comes from the simple fact that some researchers, like Winter, wish to unite deontic and epistemic modality by explaining the two domains by the same mechanisms, i.e. power relations between the speech participants and the speaker's expectations about the attitudes and expectations of the addressee (hearer). Others aim to define epistemic modality as a basic, cognitive category in language and therefore



strive to distinguish its features from related categories in a way that supports such a research perspective.

My own research on Lakandon makes me inclined to agree with Winter in that epistemic qualifications are motivated by the assumed expectations of the addressee. There is no reason to express an assurance regarding some state of affairs if you expect the addressee to already share your attitudes and beliefs. There are of course always special cases where the use of an epistemic modality marker is not as clearly motivated by the presence of the addressee, but I think these are peripheral.

Despite my preference for Winter's arguments, I believe that for some languages (e.g. Lakandon), the expectations and attitudes of the speech participants that can be found as motivations for the use of certain temporal and modal-like markers, should be accounted for in a different way. My suggestions in this regard will be clearly laid out in section 3.4, below.

### 3.3.3 Expectation

Is the notion of *expectation* the same for modality as it is for time? If it is, then *expectation* as a fundamental cognitive mechanism, should make natural time's connection to modality, rather than be seen as a kind of irrelevant coincident, which has sometimes been the case. This is especially so if one takes the structure of time (communicated time) to be contingent with, or primarily motivated by the A-series time that is concerned with time perception.

First we have to separate between two kinds of expectations. The first is a form of expectation that the speaker has on the world, whereas the second kind of expectation is between the speaker and other speech participants (most commonly the addressee) as argued by Winter above.

Expectation of the first kind is a basic cognitive ability and it follows from having remembered how certain events unfolded in the past. This memory shapes expectations for future events of the same kind. Expectation in this sense is free from the expectations of other speech participants and allows us to orient ourselves in a changing environment and react to new situations by relating them to previous ones.

The kind of expectation that exists between speech participants means that the speaker makes assumptions about the expectations of the addressee and based on these assumptions chooses to present information in a certain way.



system/inventory is costly and should be seen as an investment that in itself motivates the formation of expectations as a consequence of it.

Aspects of this process can be seen on different levels in language, all of which spring from our perception and attention. A person telling another person a story is offering an update to the knowledge (if not experience) of the other person. Such information needs to be flagged as “new”, constituting an addition to the addressee’s inventory. The speaker flags information that is already known to the addressee in a contrasting way since this is information that is already accessible to, or possessed by the addressee.

Someone presenting old information as new behaves contrary to convention since he seems to expect the addressee to be interested in, and alert to something that has already been assimilated and absorbed and therefore requires much less effort by the addressee to grasp, and remember, but perhaps *more* effort to take an interest in.

Expectations between speech participants are of course derived from the expectations that we have on the world. From memories of how people act and what they know, we form guesses about their attitudes and expectations with regard to how we present them with information and the information content itself.

One could argue for a “split” between expectations on the world (time) and expectations between speech participants (modality). Expectations that we have on events because of our prior knowledge of the world are temporal in the sense that they serve to locate a possible or probable event in time with regard to the speaker, while expectations between speech participants are not temporalised but modal-like in the assessment of attitudes of the speaker and the addressee.

It is in the protentions of the future that modality most closely coincides with temporality; the unrealised nature of a future event must be viewed as identical to the speaker’s assessment as to the probability of some event. Something that has not happened cannot be stated as anything else than a possibility or a probabillity, either as a consequence of a previous event or because of the intentions of the speaker.

If we imagine a situation where two persons are going for a walk in the forest, the following statements may be made:

(3.5) The tree is going to fall

The statement in (3.5) conveys an expectation on behalf of the speaker which he has formed because of prior experiences of trees and the conditions that precede their fall to the ground. A variety of factors come into play in making such a judgement, but there is little consideration for the addressee in this report. It is a description of the expectations of the speaker.

(3.6) The tree has fallen to the ground

Similarly, in example (3.6) the speaker states a fact about a tree that in its natural state is supposed to be standing up and therefore must be assumed to have fallen since it is no longer upright. This state of affairs is also based on the memory of the speaker but does *not* involve his/her expectations since the condition of the tree is already reached. It does not require the expectations of the addressee either. It too, is simply a description of an observation by the speaker. It could however be argued that (3.6) is an aspectually qualified description rather than a temporally situated one, since the only thing that the speaker says is that the tree is fallen at the time of observation.

Expectations can however be combined with descriptions of past events:

(3.7) The tree fell a long time ago

The statement in (3.7) is in some ways similar to (3.5) in the description of the speaker's expectations. Depending on the state of decomposition of the tree and the surrounding vegetation, the speaker makes judgements about the amount of time that has passed since the tree fell to the ground. Again, the focus is on the speaker's expectation with the addressee's expectations left out. Example (3.7) could also be interpreted as a reflection of the memory of the speaker rather than an observation, only the context can provide us with the difference.

The speaker's assumptions about the addressee's attitude and/or expectations is on the other hand *modal*, since it necessarily depends on the speaker's intention to do something or the speaker's memory of an event, both of which must somehow be relevant to the addressee.

(3.8) I am going to fell the tree

Example (3.8) also takes expectations into account, but not with regard to an event or “the world”. The speaker states his *intentions* and thereby includes the addressee with regard to what he or she can expect from the speaker with regard to the future state of the tree.

Is there a difference in stating expectations (3.5) or intentions (3.8)? Yes there is. The difference lies in where the expectations of an event are placed. By stating his intentions the speaker creates expectations for the addressee whereas if a speaker states his own expectations then they *could* create expectations in the addressee, or they could not. There is nothing in (3.5) that says that the addressee should expect the tree to fall. It simply states what the speaker expects.

If a speaker states his intentions to do something, he usually does this for a reason, either because of his own desire or because of someone else’s. What he tells the addressee, regardless of his/her prior attitudes, is that he/she can expect the speaker to fell the tree.

(3.9) The tree fell last summer

It is not entirely clear what intentions (3.9) carries without a context, but even without it, it appears the speaker is providing a personal memory, or knowledge, even though he gives no evidence about whether he saw the tree fall or not. That sort of information is not grammaticalised in English.

What (3.9) does is invite the addressee to believe the speaker since the speaker is expected to tell the truth, or at least not say things, which he knows to be untrue (cf. Grice 1957). The utterance is thus made by taking the expectations of the addressee into account with regard to the memory of the speaker<sup>26</sup>.

The involvement of the expectations of the addressee is an argument for regarding example (3.9) as containing an element of modality even though it lacks any explicit modality markers. The simple act of stating a personal memory would thus be enough to make a statement modalised although the only inflection present is in the form of past tense (*fall* → *fell*).

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<sup>26</sup> The objection could be made that any utterance by a speaker implicitly includes an addressee since there would be no reason to say anything if it was not relevant to someone else. The statement must be considered in terms of degrees given the wide range of qualifying devices that are part of a language. This is however also emblematic of language use and pragmatic considerations where the definition of utterances are on a gradient scale that depends on some features more than others but not always to the exclusion of those other features.

In sum, the concept of expectation is inherent to both *time* and *modality*. Temporal expectation is first and foremost concerned with expectations on the world and events in the world, while expectation in modality is sensitive to the perspective and the expectations of the addressee. There is thus two ways of stating your expectations; one is with regard to how the world is expected to behave and the other is about someone else's attitudes and expectations.

The latter kind has some consequences for the semantic features of time deictic expressions in Lakandon, that although they are not modal in the strictest sense, take into account the expectations and knowledge of the addressee in a salient way.

### 3.3.4 Subjectivity and inter-subjectivity

In response to Lyons' (1977) claim that there is a difference between *objective* and *subjective* epistemic evaluations, Nuyts (2001) suggests an alternative terminology concerning *access to evidence*. Objective epistemic evaluations, as opposed to subjective ones, pertain to several speech participants and not just the speaker. Nuyts proposes a distinction between a case where a) the speaker knows that he alone knows the evidence behind his epistemic evaluation, and another situation b) where the speaker assumes that the evidence is known to a wider group of people that may or may not include the addressee. One case would result in *personal responsibility* and the other in *shared responsibility* (cf. Nuyts 2001). Such a distinction is also labelled *subjective* and *inter-subjective*.

The distinction between subjective and objective epistemic modality, that Lyons suggests, involves two grammatical categories: epistemic modality and evidentiality, i.e. the speaker's evaluation of some state of affairs, on the one hand, and the status, or quality, of the information source ('evidence' in Lyons' terms) on the other (but see Aikhenvald 2004).

However, Nuyts alternative, i.e. personal vs. shared responsibility cannot correspond to a separation between epistemic modality and evidentiality, since there is no inherent difference with regard to the element of intersubjectivity in either system. Despite this, Nuyts ascribes the terms *subjectivity*, corresponding to personal responsibility, and *inter-subjectivity*, corresponding to shared responsibility, to the evidential domain, and in doing so wishes to separate it from the domain of epistemic modality.

The concept of inter-subjectivity, which is when the attitudes and knowledge of the addressee are taken into account in the evaluation of some information, is according to Nuyts present in qualifications such as evidentiality and *mirativity* (cf. DeLancey 1997) but also in deontic modality. He states that contrary to expectation, “inter-subjectivity is not present in all expressions of epistemic modality” (Nuyts 2001: 37).

Motivated by the observed semantic features in Lakandon Maya deictic time words introduced in section 1.2, the concept of inter-subjectivity must be explored in more detail in order to provide an appropriate account of the function and status of the expressions to be investigated in chapter 5. The burning question in this regard is: to *which* category does inter-subjectivity belong?

### **3.4 The perspective of the participants**

As stated in chapter 1, above, Givón (1982) argues that the addressee’s, or the hearer’s perspective accounts for the choice of syntactic constructions over others in coreference and definite description. He thereby promotes a pragmatic research perspective as the primary one in the investigation of language. The speaker will make choices in packaging information and employ strategies to refer to entities in discourse, depending on such things as “the speaker’s knowledge of the hearer’s expectation about themes and topics/referents appearing in the discourse, grounded in either the speaker’s assessment of the ongoing discourse, his knowledge of previous encounters with the hearer, his knowledge of the hearer’s personality and computational abilities, or his knowledge of specific facts concerning the hearer’s mind and its contents” (ibid: 95).

The observations that Givón presents regarding the role of the hearer are not surprising given the fact that language is a means of communication, but they have nevertheless been disregarded by mainstream linguistics in favour of a deductive, context-free view of language and linguistic structure.

Evans (2005) proposes a typology of *multiple perspective constructions* citing examples from a variety of languages. He defines them as, “constructions that encode potentially distinct values, on a single semantic dimension, that reflect two or more distinct perspectives or points of reference” (Evans 2005: 6).

The investigation looks at grammatical constructions that include semi-dependent particles and independent lexemes and does not delimit the expressions investigated to inflectional morphemes. Semantically, the (two or more) perspectives encoded must, as

the quote above suggests, be on a single semantic dimension, something that rules out double possessive constructions such as ‘his painting of me’ (ibid: 9).

Evans distinguishes between domains where multiple perspective constructions can be found. These domains partly correspond to grammatical categories where *time* is exemplified by complex tenses, *space* by deictic, demonstrative forms, *epistemic categories* by modality markers, and *person* by logophoric pronouns. Of these, the epistemic modality markers are the most relevant to the present investigation despite its focus on time reference. Tense is as stated (section 3.1.1) a poor tool for investigating time reference in Lakandon Maya and the meaning and function of deictic expressions used in temporal reference is better viewed from the notion of epistemic categories.

The investigation Evans performs is unique both in identifying multiple perspective constructions in a variety of conceptual domains as well as in attempting to map the semantic possibilities of the constructions. He views the investigation as “[a] study of how social intelligence is crystallized into grammatical structures” (ibid: 21). Evans does not propose a separate grammatical category reflecting multiple perspectives but instead investigates concept as a form of meta-category given its wide range of functions. There may, however, be reason to consider the possibility. Before this is discussed, I will take a look at the notion of inter-subjectivity as a result of semantic change.

### 3.4.1 Subjectivity and semantic change

In an investigation of processes of semantic change, Traugott & Dasher (2002) analyse modal verbs and adverbials among other categories, such as performative verbs and deixis markers. The argument is that subjectification is an important process in semantic change and that inter-subjectification arises from it.

They take Benveniste (1958) as the starting point in linguistic research on subjectivity. He saw the relationship between the speaker and the addressee (i.e. inter-subjectivity) as a situation where “each participant is a speaking subject who is aware of the other participant as speaking subject” (Traugott & Dasher 2002: 20). For Traugott & Dasher, inter-subjectivity is “most usefully thought of in parallel with subjectivity: as the explicit, coded expression of SP/W’s [speaker/writer] attention to the image or “self” of AD/R [addressee/reader] in a social or an epistemic sense” (ibid: 22). This definition means that, “intersubjectivity crucially involves SP/W’s attention to AD/R as a participant in the speech event, *not in the world talked about* (ibid: 22 [my italics]).



Inter-subjectivity is placed at the far end of a scale that represents an important course of semantic change: objectivity > subjectivity > inter-subjectivity. Most typically, inter-subjectivity is characterised by the use of “social deixis (attitude toward status that speakers impose on first person – second person deixis)” (ibid: 23).

They argue that, “subjectivity [as a prerequisite for inter-subjectivity] will have different manifestations in different parts of the linguistic system and may be shown to function differently in strategic discourse than in decontextualised conceptual structure” (ibid: 98). In their view, inter-subjectification is impossible without subjectification. The speaker has to present his point of view before attention is included with regard to the point of view of the addressee, which is when inter-subjectification occurs.

Taken together, the discussion so far points out the prominent role of the addressee/hearer in language. It suggests that the concept of inter-subjectivity is an underlying motivation for several grammatical constructs as well as for semantic change. Can the grammatical marking of inter-subjectivity and multiple perspectives be viewed as a separate grammatical category? If it were observed as a distinct grammatical entity (i.e. in the form of clitics or affixes), it would be reasonable to ask if the explicit marking of the hearer’s perspective does not require a qualificational label of its own. For a familiar language like English, this is unmotivated, but other languages seem to require a greater attention to the inclusion or exclusion of the hearer/addressee in the marking of propositions in what appears to be an obligatory manner.

### 3.4.2 Participant perspective

It is worth considering if there is a “qualification” that specifies the perspective of the participants, a category that sometimes may interact with other qualificational categories. Nuyts hints at this; “if (inter)subjectivity occurs jointly with other qualificational dimensions, and even independently, it is more parsimonious to assign it the status of a separate qualification” (Nuyts 2001: 36)

As suggested by Evans’ (2005) investigation, such a category would be expected to occur in, or interact with, other conceptual categories such as *modality*, *evidentiality*, *tense*, *person*, and *space* (see section 3.3.4). However, there may also be reason to regard it as separate from the categories that it interacts with for reasons that are discussed below.

What a category indicating an inter-subjective *participant perspective* does is to specify which participants are included in making reference to some state of affairs. The

basic distinction is between marking an event that only relates to the speaker, thereby excluding the addressee, and a contrasting situation that includes the addressee in the proposition. Instead of treating the larger participant perspective as an extension of the “basic” speaker perspective, there is reason to view the participant configuration with respect to knowledge asymmetries and expectations along side with other categories such as modality and tense.

It is important to separate the proposed category of participant perspective from the pronominal system of a language. Pronouns mark participants that stand in some relation to a predicate, while participant perspective indicates to whom an evaluation or observation-perception of a situation pertains. As stated, it essentially deals with the specification/evaluation of knowledge asymmetries and expectations with regard to the speech participants. As observed by Traugott & Dasher above for intersubjectivity, the attention with regard to the addressee is his/her participation in the speech event, “not in the world talked about” (ibid: 22).

However, participant perspective may interact with the system for person and number in the pronoun forms of a language. A great number of languages have an *exclusive-inclusive* distinction in the forms expressing first person plural, e.g. ‘we (me and some other guys not including you)’ vs. ‘we (me, you, (and the others))’. I suspect that a language that explicitly accounts for the perspective of the addressee by distinct and systematic use of grammatical constructs such as deictic forms will most readily show this in its pronoun system by having an inclusive-exclusive distinction in its plural forms for first person.

In proposing to define participant perspective as a distinct grammatical category in the above manner, a distinction is automatically made with regard to the multiple perspective constructions discussed by Evans (2005). The semantic range in some of the forms he investigates includes the perspective of an unspecified third participant, a feature that although it may prove to be found in languages that express participant perspective, is peripheral to the following discussion for empirical reasons. Grammatically, a narrow circumscription is also made to limit the definition to inflectional markers in the form of affixes or clitics to justify a comparison to already established categories.

Languages that are good candidates for showing (obligatory) participant perspective marking are observed by Palmer (1986) who lists Kogi (Chibchan, Colombia) and Nambiquara (Nambiquaran, Brazil) as two languages that specify the

inclusion- or exclusion of the addressee in statements. Palmer has no separate label for the observed features and places them in the evidentiality category, but then he also treats evidentials as a form of epistemic modality markers, so his classification must be regarded as quite rough in any case. Aikhenvald (2004) has shown beyond any reasonable doubt that evidentiality and epistemic modality are separate categories, cross-linguistically.

Participant perspective can be indicated *overtly*, *semi-overtly*, or *covertly*, in different languages. What this means is that some languages mark participant perspective (obligatorily?) in their morphology (e.g. Nambiquara and Kogi), while some show semi-overt marking in the presence of participant perspective as a semantic feature of certain forms belonging to other categories, such as person- and space-time deixis (e.g. Lakandon; see also Evans 2005). When participant perspective is covert, certain syntactic constructions and lexical expressions can reveal the participant perspective chosen, but there is no grammatical category that explicitly features the speech participant's shared, or non-shared perspectives (e.g. English and "Modalpartikeln" in German; Swedish 'ju').

With regard to Nambiquara, it appears that evidentiality as a grammatical system is closely related to, and perhaps motivated by a socio-centrally conditioned system where the speaker is expected to explicitly provide the addressee with information that allows the addressee to evaluate a proposition or a description. There is not necessarily a hierarchical relationship between evidentiality and participant perspective, but the two categories are probably motivated by the same expectations from a pragmatic point of view.

#### 3.4.2.1 Motivations for participant perspective as a separate category

Basic conceptual notions such as *time*, *aspect* and *modality* are reflected in language using a variety of strategies. In many languages, time relations are expressed by the obligatory category of *tense*. Other "tense-less" languages use time adverbs, aspect markers, and subordinate adverbial constructions to achieve the same goals.

As for the domain of time, *modality* can be expressed by inflectional morphology and is then called *mood*. Modality can also be optionally expressed by modality markers and other peripheral constructions. What I wish to point out is that although a grammatical category is absent from the inflectional morphology in some languages, it

can still be viewed as a distinct *conceptual* category in a language despite being optional.

This is also the case for participant perspective, which although it is not overtly marked in most languages by a separate set of markers, can be found in non-obligatory constructions such as the ones corresponding for tense, mood and person. For participant perspective to be granted its status as a separate category, it should not be possible to describe it under the definitions of other categories such as modality or evidentiality.

Similar to the traditional view of evidentiality as a part of epistemic modality (see Palmer 1986) because its definition had come from investigating languages that lack evidentiality as a grammatical category, participant perspective is lumped with either evidentiality or modality simply because its presence as a grammatical category is unattested for most languages, even exotic ones that may contain other categories that are unattested for most European languages.

So far, the descriptions of inter-subjectivity and the notice taken of the inclusion of the perspective of the addressee, have been described as somehow being part of the category of evidentiality or modality depending on which language it has been observed in. This has however been done in a non-explicit way without really making an argument for how the extended perspective (i.e. the inclusion of the addressee) can be accounted for under the hat of those categories (cf. Aikhenvald 2004; Lyons 1977; Nuyts 2001; Palmer 1986).

Indeed, categories can be intertwined and fused without challenging their status as separate categories. An obvious case is the future construction in English, which has been subject to debate about whether it is a mood or tense construction. There are arguments for both points of view. Even so, no one would claim that mood and tense are the same category.

The same is true for participant perspective. Below, I will discuss some examples from the Amazonian language Nambiquara in addition to the analysis proposed for Lakandon Maya, which occupies all of chapter 5 and 6, and which was introduced in section 1.1.4. The concept/category of participant perspective is present in both languages on different levels that may be labelled, overt and semi-overt, respectively.

### 3.4.2.2 Participant perspective marking in Nambiquara

Of the two attested languages that have morphological markers expressing participant perspective, as mentioned in section 3.4.2 above, it appears that at least one of them has to mark that information obligatorily, namely Nambiquara.

The information that is available to me on Nambiquara consists of a chapter by Ivan Lowe in “The Amazonian Languages” by Dixon & Aikhenvald (1999) and a special issue of the International Journal of American Linguistics where Menno Kroeker (2001) sketches the language.

The two sources are largely uniform in that they list mostly identical forms that pertain to tense/evidentiality and a category that Lowe calls *newness*, and Kroeker has the term *verification* for (actually following Lowe 1972 [in Palmer 1986: 77; *event verification*] who apparently has changed his mind since).

The latter category distinguishes *new-* vs. *given-information* in Lowe’s terms, and *individual* vs. *collective verification* in Kroeker’s terminology. A separation into two paradigms (i.e. new-given) appears motivated since there are two separate sets of markers indicating tense/evidentiality inflection. Some of the markers are fused with all three parameters present in a single morpheme (mostly for the new-information set), while others only carry the content of a single semantic feature.

The categorisation advocated by Kroeker with regard to verification does not correspond to the division of newness, as proposed by Lowe (1999). A separation between individual and collective verification, as Kroeker suggests, is not supported by the presence of the suffix *-na3*<sup>27</sup>, meaning ‘action currently observed by both speaker and hearer’, which belongs to the *individual verification* paradigm, which in Lowe’s terminology is the *new* set:

- (3.10) *wa3kon3-na3-ra2*  
work-3SG-OA.PR-NW-SPKR.ADR-PERF  
‘He is working’  
[observed action (OA); present (PR); new (NW); speaker+addressee (SPKR.ADR); perfective (PERF)]  
(Lowe 1999: 275 [my glossing])

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<sup>27</sup> Nambiquara has three tones indicated by numbers, falling (1), rising (2), and level (3).

What the suffix *-na3-* means, is that even though the event is marked as new information, it can still be observed by both the speaker and the addressee. This fact favours the new-given label before the individual-collective one.

What both authors agree on are the forms that pertain to the given-information suffixes. They are, however, considered too fused to warrant a separation into their separate parts by Lowe, who simply lists the phrases without any morpheme separation. Kroeker follows Lowe, but provides more examples and some glossing and morpheme separation but without assigning a distinct meaning to each morpheme.

A comparison between the forms reveals that the morphemes representing tense and evidentiality (i.e. information source) are indeed fused into one morpheme, but that the ones pertaining to *newness* and *speaker-addressee perspective* consist of two separate CV morphemes. The first morpheme, *-ti2*,<sup>28</sup> indicates that an event is *given* information. This interpretation is inferred from the existing nominal marker *-li2*, or *-ti2*, that also marks given information on the noun (Lowe 1999: 282).

The suffix *-tu3-* is left to mark the perspective of the participants with regard to the event, namely that the speaker and the hearer (addressee) both perceived it either by observation, inference/deduction, or by report, depending on the preceding tense/evidential suffix. A phrase from the given-information set displaying these markers can be seen below:

- (3.11) *wa3kon3-Ø-tait1-ti2-tu3-wa2*  
 work-3SG-OA.MP-GV-SPKR.ADR-PERF  
 'He worked'  
 [observed action (OA); mid past (MP); given (GV)]  
 (Lowe 1999: 276 [my glossing])

The suffix *-tu3-* shares the level tone with the *-na3-* suffix from the new-information set (example 1), which also indicates a shared perspective between the speaker and the addressee, but marking new information.

Perhaps by default, the suffixes that pertain to given information and participant perspective occur together within the given information set; *-ti2-tu3-*, but that does not make them the same morpheme, nor does it require them to carry an identical meaning. It would seem contrary to the general shape of suffixes and the process of suffixation in

<sup>28</sup> The suffix *-ti2* appears to have an allophone, *-ni2*. In the phonology section Lowe reports a similar variation in the phonological realisation of the 1sg subject suffix between *-al-*, *-nal-*, *-tal-*, *-hal-*, *-lal-*, depending on the phonological context (Lowe 1999: 273).

Nambiquara to regard a CV(1-3)CV(1-3) suffix as a single morpheme. In all other cases reported by Lowe, a suffix has a CV(1-3) structure except when it is fused as in the case of tense/evidentiality, but then the resulting morpheme only has *a single tone level* specified for the fused form.

Aikhenvald (2004) briefly comments on the individual/collective observation system of Nambiquara by noting its unusual nature (ibid: 234). She appears to view it as a part of the evidential system but without stating why that should be so. Since Aikhenvald devotes the greater part of her monograph to the definition of evidentiality as expressing information source, it would be surprising if she includes a variation in the perspective of the participants in the system for evidentiality.

#### 3.4.2.3 Summary of the features of participant perspective

In Lakandon we see the presence of participant perspective in the time deictics referring to past events. In the speaker's presentation of his own personal knowledge, he must take into account the knowledge of the addressee regarding the same information. The participant, and the temporal perspectives are fused in the forms *7uhch*, *ka7ch(ik)*, *b'aje7*, and *tok* (see chapter 5).

In Nambiquara, the marking of participant perspective is done in a more overt manner. It appears that together with evidentiality, participant perspective is obligatorily marked regardless if the information it attaches to is new or given (*-na3-* vs. *-tu3-*). Markers of participant perspective appear as separate morphemes and are not fused like the markers for tense and evidentiality.

The fact that an inter-subjective perspective is present in the time deictics of one language (Lakandon) and in conjunction with evidentiality markers in another (Nambiquara) can mean one of two things; either the facts presented for these two languages exemplify the presence of an additional qualificational category in language, or they are the expression of a pragmatically dependent phenomenon that can be explained by being accommodated in the categories that it co-occurs with.

If one does not wish to stretch the concept of temporality in Lakandon to accommodate the perspective of the addressee, and if one can not account for the same semantic features as part of the category of evidentiality in Nambiquara, then we are left with are two instances of how languages express a category/concept that indicates which participants that knowledge or some observation pertains to. In defining this category it is important to point out that only Nambiquara has a grammatical category

of participant perspective. Lakandon only has participant perspective present in certain parts of its grammar, most importantly in the category of deixis for person, space, and time.

Because of this, the term participant perspective will not be used in the remainder of the investigation as a categorical tool for investigating the conveyed and encoded meaning of forms that are analysed and discussed in chapters 5 and 6. For the same reason that tense is absent in the following analysis of Lakandon time reference, participant perspective is also avoided as a tentative categorical label in favour of an analysis and discussion of the inherent semantic features of time deixis a number of central time words in Lakandon Maya.

### 3.4.3 Available participant asymmetries

Participant perspective expresses the (a)symmetries of knowledge/perception that exist between the core speech participants (i.e. the speaker and the addressee). There are four logically available distinctions:

- (i) the speaker presents information as personal knowledge that he assumes is inaccessible to the addressee:  $SPKR > ADR$
- (ii) the speaker presents information as (personal) knowledge that he assumes is accessible to the addressee:  $SPKR = ADR$
- (iii) the speaker asks for inaccessible information (to the speaker) that he assumes is accessible to the addressee:  $SPKR < ADR$
- (iv) the speaker presents information that is inaccessible to himself and to the addressee:  $SPKR \vee ADR$

Of these four symmetry relations, two are accounted for in the description of Lakandon above, namely (i) and (ii). The third symmetry relation suggests the presence of an *interrogative*-like marker, but including a marker to represent asymmetry (iii) poses a problem in Lakandon since its function is separate from the previously mentioned markers, *7uhch* and *ka7ch(ik)*.

The interrogative marker that would indicate the speaker's ignorance and the request for the addressee's knowledge, *wa*, is a marker used in y/n-questions and non-WH-questions, such as the one in (3.12):



- (3.12) *teech a-tzimin-e7 eek' wa säk?*  
 2SG.IND DET-horse-TD.ANA black Q white  
 'Is your horse black or white?'  
 [ALIM questionnaire MChKY e-0065]

Palmer (1986: 78) states that many languages formally group interrogative markers with modality markers. Some interrogative markers reflect the speaker's ignorance with regard to some state of affairs, but they can also be used to express the speaker's doubt and thus functions as a *dubitative* epistemic marker.

In example (3.13), a man asks a healer if his wife will recover from an illness, thus explicitly eliciting information from the addressee:

- (3.13)a *je7 wa uch'een inraak'*  
 ASSUR Q 3SG.A-cure 1SG.A-wife  
 '(the man) Will my wife be well? (lit. is it certain that my wife (will be) well?)'
- b *y-a7r-qj-Ø je7 u-ch'een-e7 kij*  
 3SG.A-say-CP-3SG.B ASSUR 3SG.A-cure-TD.ANA QUOT  
 '(the healer) He said, she will get well, he said'
- [HB040924\_1EChK\_1]

But in (3.14), *wa* functions as a dubitative marker rather than an interrogative marker, as can be seen in an exchange that concerns the fate of an ill-tempered owl who was dumped in a mass of water so that it would leave a poor Lakandon in peace and not pester him by soiling his food:

- (3.14)a KYYM: *ma7 wa ich k'ahk'.naab'-i7*  
 NEG1 DUB LOC sea-TD.LOC  
 'I don't think it was in the sea'
- b CChNK: *mix ich k'ahk'.naab' chumuk ja7 in-t'aan*  
 NEG2 LOC sea middle water 1SG.A-word  
 'Not in the sea, in the middle of the river, I think'
- [HB050211\_3KYYM\_2]

*wa* has at least one other function, namely as the head of conditional sentences:

(3.15) *wa k-u-taar ya7rir k-u-ch'ik=chuhn*  
 COND INC-3SG.A-come rain INC-3SG.A-first=begin

*u-jo7k'-ar u-roob'ir-ir*  
 3SG.A-come.out-PLN.IV 3SG.A-weed-NOM

'If (when) the rain comes, the plants begin to grow.'

[060925 MChKY]

*wa* shares a measure of mobility with *7uhch* and *ka7ch(ik)* in its placement within the phrase by being able to occupy a verb/predicate-final position (3.12) as well as a focussed, sentence initial position (3.15). Similarly, *wa* has different meanings and functions depending on where in the phrase it is placed. It cannot be topicalised on its own, however.

A strong argument against viewing *wa* as the third knowledge asymmetry marker, lies in the fact that it is never present in *wh*-questions. If marking knowledge asymmetries were its primary function, then we would expect to see it in *all* interrogative constructions where the speaker is eliciting information from the addressee. The fact that it does not, means that the case for its status as a marker indicating a SPKR < ADR perspective is weakened.

There is, however, an alternative to the discarded view of *wa* as representing a knowledge asymmetry from the perspective of the addressee. As will be evident from the analysis of the specific forms in chapter 5, the investigated markers, *7uhch*, *ka7ch(ik)*, *b'aje7* and *tok*, are all used in questions resulting in a mirrored asymmetry to the one the form possesses in declarative statements. This means that *7uhch* ('before', 'previously') in an utterance formed as a question has its knowledge asymmetry reversed in order to elicit information from the addressee that the speaker himself lacks any knowledge of. The same is true for *b'aje7* ('now', 'presently'). *ka7ch(ik)* ('before', 'previously'), on the other hand is unaffected by occurring in a question since it already marks knowledge symmetry between the speech participants. It thus appears that the third asymmetry relation can be found with the forms containing the first one by placing them in an interrogative construction.

The situation in Nambiquara is different with regard to the existence of a third asymmetry situation where the speaker elicits information from the addressee (Kroeker 2001: 24 pp). The interrogative markers that mark various types of predicates are found in *all* interrogative constructions, including *wh*-questions, thereby strengthening the

case made from the previous observations regarding participant perspective marking in that language as an obligatory category.

The same distinction into two sets with regard to new and given information that is found for indicative verbs, is also present in interrogative constructions. Consequently, there do not seem to be any structural or grammatical differences in marking asymmetries of access to information, as listed in (i-iii), between the speaker and addressee in Nambiquara.

The fourth scenario where neither the speaker, nor the addressee possess knowledge about some event/state is not expected to carry any one specific marker since uttering a statement that neither of the speech participants have any real knowledge of will predictably be marked using a variety of qualificational markers depending on the information itself.

If we stay with knowledge asymmetries between the speaker and the addressee, a reported information marker, for instance, would not necessarily be appropriate to signal ignorance on both the speaker and the addressee's behalf, since it introduces a third participant that provides the information. When only the speaker and the addressee are positioned with regard to information, a situation where none of them can claim knowledge about something would either result in, a null utterance, where the speaker does not say anything; an unmarked statement that lacks any qualifications (probably perceived as a break of speech conventions in a language that has participant perspective as a grammatical category); or alternatively marking a statement as speculation. I have no detailed observations to offer in this regard with respect to either Lakandon or Nambiquara.

### **3.5 Chapter summary**

The information that is presented in this chapter constitutes the platform on which the rest of the investigation stands. It is my opinion that too much usually is assumed in investigations of grammatical phenomena such as tense and event-order, and that a widening of the time concept to include anthropological and philosophical concepts is useful for the purpose of the present investigation.

I have advocated the viewpoint that tense and the wider concept of time in language are separate. The A- and B-series time concept may in addition be used as a bridge between the objective view of time in language as more or less identical to tense

theory, and time concepts of a more subjective nature that are central to the present investigation.

The concept of modality was briefly discussed in order to contrast with the semantic features pertaining to the speech participants – i.e. inter-subjectivity – that was explored and tentatively introduced as a categorical distinction called participant perspective. Despite the introduction of this novel categorical distinction, it will be of limited use in the main part of the investigation since the in-depth exploration of the conveyed and encoded semantics of Lakandon time deictics is deliberately freed from categorical constraints.

The analysis of the semantics found in deictic (demonstrative) forms used to make reference to temporally situated events should primarily be directed towards investigating how those deictic forms relate to the greater system of deixis in the language, instead of determining what qualificational category they resemble most.

## 4. The grammar of time in Lakandon Maya

This chapter describes grammatical features of several expressions that are relevant for making temporal reference in Lakandon Maya. As expected, almost all of them are connected to the verb phrase to varying degrees. In this chapter I am mainly concerned with the grammatical form and function of words used in time reference. A detailed description of the semantic features of time words and particles is left for chapter 5.

The two word classes that are most important for the description are *verbs* and *particles*. The inflection of verbs by status and aspect-mood, and the form-function of particles make up the grammatical background for the subsequent semantic description of time reference in Lakandon. Section 4.1 accounts for the inflection of the verb by *aspect-mood* and *status*, and 4.2 describes the particle class, followed in section 4.3 by an attempt to classify the time words that are central to the investigation. Section 4.4 is a description of the forms belonging to the deictic paradigm in Lakandon and how they compare to the ones found in Yukatek.

### 4.1 Aspect-Mood and Status marking

As stated in section 2.4.3, the verb in Lakandon (and in other Mayan languages) is inflected for *person*, *number*, *status*, and *aspect-mood* (cf. Kaufman 1990). The system for person and number has been described in sections 2.4.3.2 and 2.4.2.5, which leaves us with aspect-mood (AM), and status marking here. I use the terms aspect and mood since I do not believe that there is tense marking in Lakandon, a claim that also has been made for Yukatek (cf. Bohnemeyer 1998). I will comment more on this in 4.1.3 below.

#### 4.1.1 Status

Status is a somewhat opaque concept that is intimately connected to AM-marking, but which also needs to be kept separate from it. AM-markers belong exclusively to a certain status marker but the status does not specifically indicate what aspect/mood a verb is inflected for. Often one might just as well say that the status marker indicates which aspect/mood the verb is *not* inflected for.

Although descriptions of Mayan languages usually contain the category of *status*, it is hard to come by a good explanation of what status actually does for the verb phrase. Status markers indicate the valence of the verb, i.e. whether the verb root is transitive or intransitive. The signalling of argument structure indeed appears to be the main feature

of status markers, something that Lucy (1994) argues for Yukatek, although the focus of his investigation is on describing the lexical semantics of verb classes.

Status markers can also indicate if a phrase is dependent or independent of another phrase, i.e. if it is a main clause or dependent clause. This is, however, not a completely transparent feature since some status-inflected clauses can function in both contexts, i.e. as main- and dependent clauses.

In Lakandon, there are three statuses: 1) *incompletive/plain*, 2) *completive*, and 3) *dependent*. The *imperative* has been suggested as a fourth status but there are some complicating factors because of the special nature of imperatives. Hofling (2000) considers the imperative to be a separate status in Itzaj Maya, and there are some arguments in favour of his claim.

The marker signalling the imperative changes form according to transitivity like other status markers. Also, the place it occupies in the verb phrase, as a suffix, makes it look like a status marker since aspect-mood markers in contrast are prefixed to the verb.

However, there are also factors that do not support Hofling's claim. The imperative in Lakandon functions as a sentence mood on the level of speech acts as it does in many other languages. Sentence mood is, of course, not marked in a way that resembles regular mood marking on the verb since these are two different kinds of mood. Imperative phrases are contrasted conceptually to declarative- and interrogative statements, and do not imply an obligation or judgement with regard to some statement like deontic and epistemic mood marking do (cf. Palmer 1986).

Also, negative imperatives are not inflected the same way as affirmative ones. The presence of the negative marker *ma7* makes it impossible for both intransitive and transitive verbs to bear the imperative suffix. Other status markers do not change depending on whether a statement is negative or affirmative.

I think the case is inconclusive whether one should regard the imperative as a status marker or as being separate. There is no consistent paradigm of speech acts that it fits into along with declarative and request constructs since these can be formed using all three statuses equally. The same is true for negative constructions. Since the imperative is a rather special case in many languages and given that it is uninflected for person and aspect-mood, I am hesitant to equate it with the other statuses, which do interact with these two categories.

Below are examples of the three statuses (4.1-4.3) and the imperative (4.4). Transitive verbs are (a) and intransitives are (b):

Incompletive/Plain: TR *-ik*; IV *-Vr*

- (4.1) a *k-uy-ir-ik-Ø* *b'äk'*  
INC-3SG.A-see-PLN-3SG.B animal  
'He sees the animal'

- b *k-u-johk'-or* *b'äk'*  
INC-3SG.A-come.out-PLN.IV animal  
'The animal comes out'

Dependent: TR *-ej*; I *-Vk*

- (4.2) a *ka7 uy-ir-ej-Ø* *b'äk'*  
SUB 3SG.A-see-DEP-3SG.B animal  
'that he sees the animal'

- b *ka7 johk'-ok-Ø* *b'äk'*  
INC-3SG.A-come.out-DEP.IV-3SG.B animal  
'that the animal comes out'

Completive: TR *-aj*; I *(-ij)*

- (4.3) a *t-uy-ir-aj-Ø* *b'äk'*  
COM-3SG.A-see-CP-3SG.B animal  
'He saw the animal'

- b *johk'(-ij)-Ø* *b'äk'*  
come.out-CP.IV-3SG.B animal  
'The animal came out'

Imperative: TR *-ej*; I *-en/-V7*

- (4.4) a *7ir-ej-Ø* *b'äk'*  
see-IMP-3SG.B animal  
'Look at the animal!'

- b *johk'-en*  
come.out-IMP  
'Come out!'

The dependent status (4.2) is named by its function in dependent clauses but not all dependent clauses take the dependent status. The plain status is available for both dependent and independent clauses. The completive status occurs with only one aspect marker, *t-*, which reserves the completive status marker for the completive aspect only. That is the reason why I previously remarked that a status marker sometimes indicates which aspect it is *not*. This is what the incompletive/plain *-ik* suffix does; it indicates

that the verb is not marked for the completive status. But it does not reveal which aspect marker out of a quite large variety, that the verb is marked for given its incomplete/plain status.

One reason to call the plain status incomplete is because it is in opposition to the completive. It does not make much sense, though, since the plain status may combine with the terminative aspect and the recent past marker which both indicate that an event is finished or completed at the moment of speech. Because of this it appears better to call it plain, instead of incomplete, which is what I will do from now on.

To summarise, the category of status interacts with all other inflectional categories on the verb but its main function is to signal the valence of the verb, i.e. the argument structure of the verb root.

#### 4.1.2 Aspect-Mood

As for other areas of its grammar, aspect marking in Lakandon conforms closely to the other Yukatekan languages. AM-marking is pre-positioned to the verb either as prefixes: *k-* ‘incomplete aspect’; *t-* ‘completive aspect’, or as stative predicates: *ʔuhch* ‘remote past’; or *tz'o7k* ‘terminative aspect’.

As stated in the previous section, all AM-markers co-occur with a specific status marker. It is possible for adverbs to occupy the position of AM-markers, but they are different from proper AM-markers in that they can combine with any status. Moreover, they do not exclude the presence of prefixed AM-markers in the form of the prefixes *k-* and *t-*:

- (4.5) *su7=su7*      *k-in-b'in*      *ch'uhr*  
 REDUP=often    INC-1SG.A-go    urinate  
 ‘I go to pee all the time’

Example (4.5) shows an adverb, *su7su7*, that has no function as an AM-marker but occupying the position of one, something that can be seen clearly from the presence of the incomplete aspect marker *k-*.

In example (4.6a), the AM-marker *tahnt* occurs together with the plain status and is contrasted with the ungrammaticality of (4.6b) where the dependent status is used and with (4.6c) where the prefix *k-* is present:



- (4.6) a *tahnt in-k'uch-ur*      *ich inw-atooch*  
 IMM 1SG.A-arrive-PLN.I LOC 1SG.A-house  
 'I have just arrived at my house'
- b **\*\*tahnt**    *k'uch-k-een*      *ich inw-atooch* (DEP)  
 IMM      arrive-DEP.IV-1SG.B    LOC 1SG.A-house
- c **\*\*tahnt**    *k-in-k'uch-ur*      *ich inw-atooch*  
 IMM      INC-1SG.A-arrive-PLN.IV LOC 1SG.A-house

There are consequently two crucial grammatical characteristics that define AM-markers in Lakandon: 1) mutual exclusivity, i.e. AM-markers cannot combine, 2) a predefined relationship between AM- and status marking, which rules out combining a specific AM-marker with more than one status marker.

In addition to these two diagnostic features, AM-markers have several other grammatical traits that place them in relation to the following verb, the most important being the function of the AM-marker as a (stative) predicate that takes the following verb as an argument. The full story regarding the analysis of AM-markers as one-place predicates can be found in Bohnemeyer (1998) and I refer the reader to his analysis for details.

The complete list of AM-markers must thus be divided according to the status they combine with, which gives us three groups; *plain*, *dependent*, and *completive*. Since the completive status can only take the prefix *t-*, the presentation is limited to two tables, the first one containing the plain status AM-markers and the second with the dependent set.

AM-marker	GLOSS	Meaning	Attested for YUK or ITZ	SL or NL
<i>k-</i>	INC	X V-s	YUK+ITZ	Both
<i>je7...-e7</i>	ASSUR	Surely, X will V	YUK+ITZ	Both
<i>tz'o7k</i>	TERM1	X has finished V-ing..	YUK+ITZ	Both
<i>tahn</i>	DUR	X is V-ing	YUK+ITZ	Both
<i>yaan</i>	OBL	X has to V	YUK+ITZ	Both
<i>mahn</i>	PERF	X has V-ed	-	Both
<i>tahb'ar</i>	PROB	X is about to/almost V(-ed)	-	Both
<i>tahnt</i>	IMM	X just V-ed	YUK+ITZ	Both
<i>ta(h)k</i>	DESR	X will V /wants to V	YUK+ITZ	Both
<i>na7n</i>	CUSTM	X usually/ is accustomed to V	-	SL
<i>suhk</i>	CUSTM	X usually/is used to V	ITZ	NL
<i>xu7r</i>	TERM2	X is done V-ing	ITZ	SL

TABLE 4.1 LAKANDON AM-MARKERS THAT COMBINE WITH THE PLAIN STATUS

Many of the AM-markers are cognates of markers found in Yukatek (YUK) and Itzaj (ITZ), as indicated in the table. A couple of markers are also specific to the southern (SL) or the northern (NL) dialect. Even though the markers in table 4.1 are the only ones I have found in either of the two dialects, it is entirely possible that there are others that I have not encountered yet.

The AM-markers belonging to the dependent status mainly function as temporality markers. Some of them are called “temporal distance markers” by Bohnmeyer (1998) for Yukatek, although they have less to do with temporality and tense than the name suggests (cf. Bohnmeyer 1998):

AM-marker	GLOSS	Meaning	Attested for YUK or ITZ	SL or NL
<i>b'ihn</i>	FUT1	X might/may V	YUK	Both
<i>b'in ERG-ka7</i>	FUT2	X is going to V	ITZ	Both
<i>ka7</i>	SUB/OPT	That X V	YUK+ITZ	Both
<i>7uhch</i>	REM1	X V-ed more than 2 weeks ago	YUK(+ITZ)	Both
<i>sahm</i>	REC1	X V-ed less than a two days ago	YUK+ITZ	Both
<i>ma7 uhchak</i>	REM2	X V-ed between 2-1 week(s) ago	ITZ?+YUK?	Both
<i>ma7 sahmak</i>	REC2	X V-ed earlier today	ITZ?+YUK?	Both

TABLE 4.2 LAKANDON AM-MARKERS THAT COMBINE WITH THE DEPENDENT STATUS

As stated above, AM-markers are considered by Bohnemeyer to be of a stative (verbal) origin and take the following “main” verb as its argument (see also section 4.3, below):

- (4.7) *7uhch [inw-ir-ej-Ø a-teet]*  
 REM1 1SG.A-see-DEP-3SG.B 2SG.A-father  
 ‘(It was) long ago [that I saw your father]’

As far as the semantics of the markers are concerned, the “translations” in the table are not entirely satisfactory since there is no real measurability connected to the forms in the table. Very little of our own occupation with naming dates can be found in the speech practices of Lakandon speakers. There are words for ‘day’, ‘month’ and ‘year’, but at least the two latter concepts are used loosely and there is no fixed date or time when ‘next year’ is, only that it begins with the dry season (see also section 5.6).

#### 4.1.3 The absence of tense marking in Lakandon Maya

The categorical concept of tense is not subject to a definite description that everybody agrees on as indicated in section 3.1.1.1. Although there is an ongoing debate on what a tense marker is, and how the category of tense ultimately should be defined, there are a number of features that are fundamental to the discussion. In the present section I will repeat some of the discussion from 3.1.1.1 regarding the form-features and semantics of tense markers in language, and how they correspond to markers of verb-morphology in Lakandon. For a more in-depth discussion of the topic of tense, there is a variety of works to choose from. Two that provide good introductions to the topic of investigation are Comrie (1985) and Klein (1994).

First of all, if a tense system is present in a language, then there must be some kind of *obligatory marking* that combines with the verb phrase, either in the form of an affix, a clitic, or a more independent lexical element. The main function of this marker should be to *locate an event in time* (Event time: E) with regard to the moment of utterance (Speech time: S) and/or some other reference time (Reference time: R). It is common for tense markers to carry additional aspectual or modal content, but this does not necessarily challenge their function as tense markers (cf. Dahl 1985).

Another diagnostic feature of a tense marker is that it makes *exclusive reference* to a past, present, or future time, depending on the specific contrasts available in a given language. In English, a *past* tense marker does not refer to a past *and* a present point in time while keeping the same form. Nor is a future marker used in an unmodified form to

make reference to a past event (e.g. future in the past). If a “future”-marker is used in such a way, it is not a future tense marker. There are, however, specific uses of tense marking to achieve discourse effects that do not reflect the properties of the system as discussed here, but we will leave these aside.

Tense markers should be *combinable with temporal adverbs* that explicitly state the time for an eventuality. Examples of such words are ‘yesterday’, ‘today’, ‘tomorrow’, ‘last week’, etc. Although a past tense marker may not make precise reference to a time that is at some distance from the moment of utterance, it should be possible to combine it with such a specification.

An important consequence of placing an eventuality on the time line is that the eventuality that it marks *cannot be cancelled*. You cannot say: \*\*‘I went out to dinner with my mother yesterday, but (in the end) I didn’t go’. If this phrase made sense to an English speaker, then ‘went’ would not be classified as a suppletive past-tense form of the verb ‘go’, which in reality is the case.

Once it has been established that a language has tense as a grammatical category, then other criteria will be useful in determining which markers are tense markers and which ones are not. These criteria have to do with how a certain marker “maps” onto already established tense markers. If they do not map very well, as is the case with *will* when compared to *-ed* in English, then it may be better to group that marker with another category.

Tense systems in the languages of the world can appear very different, but there is usually a minimal contrast between past/non-past, or even future/non-future. Some languages have a neat three-way distinction between past/present/future, but this does not have to be the case.

It is my opinion that tense marking is absent in Lakandon Maya and I present the main arguments for this claim in the present section. My opinion on this matter is not my invention, but has already been forwarded by Bohnemeyer (1998) for Yukatek. The differences between Lakandon and Yukatek with regard to AM-marking on the verb are negligible, which almost automatically makes an analysis of Yukatek valid for Lakandon. Nevertheless, I will present some arguments and evidence for the absence of tense in Lakandon, although in a less rigorous manner than Bohnemeyer.

#### 4.1.3.1 The case of the completive-incompletive paradigm

In his dissertation on event order relations and time reference in Yukatek, Bohnemeyer (1998) makes it his business to refute the existence of all lexicalised means for expressing event order in the language, in part by comparing them to tense markers and temporal operators in German. As a means to achieve his goal, Bohnemeyer performs a methodical investigation of all available AM-markers and (most) freestanding time adverbials in Yukatek. What I have found in Lakandon matches well what Bohnemeyer reports for Yukatek, but I draw on other arguments and evidence than those Bohnemeyer uses in his – by all accounts – impressive and encompassing work.

The most obvious place to look for something resembling tense marking, is in the paradigmatic opposition between the *completive* and the *incompletive* aspect<sup>29</sup>. These two concepts should be considered as basic both from a formal and semantic perspective. They have already been introduced in section 4.1.2 so I will restrict the discussion here to some arguments regarding their (non-)function as tense markers.

The arguments promoted by Bohnemeyer regarding the non-function of the completive aspect as a tense marker are not as convincing as the ones he presents for the other AM-markers mostly because the completive aspect actually *is* used to locate events in time and *is* combinable with time adverbials that specify event time.

An argument that may be worth considering in this matter to support the argumentation presented by Bohnemeyer takes its starting point in a comparison with available typological information on tense systems in the world's languages. The minimal contrast available in tense systems appears to be a two-way opposition between either past/non-past, or future/non-future. If this is indeed a minimal requirement then it can be used to argue for the status of the completive in Lakandon as an aspect marker, and not a tense.

It is beyond any doubt that the incompletive is indeed an aspect and that it does not really serve to locate an event with respect to the moment of utterance. Its use in past- and future time reference makes this clear. In these contexts the incompletive can be translated as 'was VERB-ing' and 'will be VERB-ing' respectively. Given that the most basic paradigmatic contrast in Lakandon Maya is between the completive and

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<sup>29</sup> Bohnemeyer considers this opposition to be one between *perfective* and *imperfective* aspect and consequently calls them by those names. He reserves *completive* and *incompletive* for the status markers that are combined respectively with the aspect markers. I follow Kaufman in this regard who considers the labels perfective and imperfective to be out of place in Mayan languages in general (p.c.). However, their ultimate definition with regard to labelling has little relevance for the present discussion, which is why I will not press the issue any further.

incompletive, the function of the incompletive poses a problem for the argument that the primary function of the completive is as a past tense marker.

In (4.7) below, a story about the storyteller's childhood features the use of both aspects in a "past" context. The use of the completive and the incompletive is motivated by event perspective (i.e. aspect) rather than the temporal location of the event given that the temporal perspective is identical for the phrases that are marked in bold:

- (4.7) a *jertruhdi su7=su7 taar ich san.kintiin*  
 PN REDUP=often come LOC TN  
 'Gertrude came to San Quintín all the time'
- b *t-uy-ir-aj-Ø ma7 b'a7 k-ij-jaan-t-ik-o7b' uhch*  
 COM-3SG.A-see-CP-3SG.B NEG1 thing INC-1PL.A-eat-TR-PLN-PL before  
 'She saw that we had nothing to eat,'
- c *je7r-o7 t-u-yahm-t-een.o7b'*  
 OST-TD.DIST COM-3SG.A-help-TR-1PL.B.EXCL
- k-u-yahm-t-a7b' in-teet*  
 INC-3SG.A-help-TR-CPASS 1SG.A-father  
 'so she helped us, my father was helped (by her)'
- d *räk t-uy-ir-aj-Ø mana7 inw-o7ch-o7b'*  
 all COM-3SG.A-see-CP-3SG.B NEG.EXIST 1SG.A-food-3PL.B  
 'She knew that we didn't have any food'

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The switch between using the incompletive and the completive is simply a matter of viewing the situation, using two basic perspectives. One states the fact that Gertrude helped the family by giving them food and shelter (completive) and the other refers to the state of being helped as an ongoing activity (incompletive).

It would seem logical to assume that the relevant "tense" opposition in Lakandon, if there is one, is between past/non-past, but this contrast is not possible to maintain if the incompletive is available for past- as well as present time reference. If the primary function of the completive really is to refer to a past event, then the incompletive should not be available for making reference in a past context too. If both the completive and the incompletive can be used in past time reference, then their primary function must be of another kind than that of tense marking. The tense system in Lakandon would in that case contain a contrast between past1/past2, where past2 is both past and non-past.

It is in the nature of the completive aspect that any eventuality marked by it has already happened. The reason you cannot use the completive aspect in a sentence like: 'tomorrow, he will (have) dropped the glass', is not because the completive aspect really is a tense, but because the 'will VERB'-construction does not take completive *status marking*. It takes the dependent status. The dependent status is discussed above in section 4.1.1 and does not contribute semantically to time reference and/or aspect marking. In the same section it was also stated that the completive aspect does not combine with any other status marking than the completive status. Hence, it is the grammatical patterning of statuses together with aspect markers that determines the (non-)availability for using the completive aspect in non-past reference, not its inherent semantics and supposed tense function.

Bohnenmeyer posits a "Modal Commitment Constraint" to explain the unavailability of the completive aspect for future time reference but I fail to see the necessity to draw on pragmatic parameters to explain the non-tense function of the completive aspect given its obvious grammatical (intra-systemic) features.

The present investigation does not depend on the exact function of the completive aspect marker. I include the discussion above to support my views on the absence of tense in Lakandon. For a complete exposé of the completive aspect in Yukatek, I refer the reader to Bohnemeyer (1998).

#### 4.1.3.2 The case of *7uhch* and *sahm*

The "temporal distance markers", *7uhch* and *sahm*, that were introduced above (4.1.2) are other candidates for markers that situate an event in time. Partly, this is one of their functions but not in a way that motivates regarding them as tense markers.

In favour of a tense-like interpretation is the fact that they are non-cancellable. This means that they do refer to an event that is anterior to the moment of utterance. You cannot say, using *sahm*; \*\*'A while ago, I met an old friend, but I didn't meet him'. The presence of *sahm* means that the meeting took place. The same goes for *7uhch*.

However, neither *sahm*, nor *7uhch* are obligatory. You do not need to use either if you e.g. wish to say that you met a friend sometime before the moment of utterance. They are both optional. They are modifiers of a verb but do not serve to situate an event at a *specific time* before the moment of utterance.

This claim is also supported by the fact that you cannot combine a distance marker like *7uhch* with a time adverbial specifying the location of the event in time:

- (4.8)    \*\* *juntuhr*    *ya7x.k'iin*    *7uhch*    *inw-ir-ej-Ø*    *a-nuhp*  
              other            year            before    1SG.A-see-DEP-3SG.B    2SG.A-friend  
              'I saw your friend a year ago'

The impossibility of combining a temporal distance marker with a specification of its temporal location is one argument that Bohnemeyer puts forth to support his claim that the distance markers are different from tense markers.

Anteriority with regard to the moment of utterance is a semantic feature of the temporal distance markers but it is not enough to consider them as markers of tense.

Other clues to the semantic content of the temporal distance markers come from their use as adverbs. In the form of a freestanding adverb, the semantics of *7uhch* is closely connected to the concept of modality and used to describe the perspective of the speech participants. *Degree of certainty* and *commitment* to the actuality/realisation of an event are salient parameters. This does not exclude anteriority from the semantics of *7uhch*, but only makes temporality less salient than you might expect given its traditional description in Yukatek (Bohnemeyer 1998, excluded!) and Itzaj (cf. Blair 1964; Bricker et al. 1998; Hofling 2000).

#### 4.1.3.3 The case of *b'i(h)n*

Future marking using *b'i(h)n* is not achieved in the form of tense reference either. The relevant parameters of meaning and the pragmatic motivations of *b'i(h)n* are discussed in chapter 5, but I will present an illustrating example in this section to support a non-tense interpretation of the construction.

The most obvious argument in this regard is the fact that *b'i(h)n* in the construction *b'in ERG-ka7* can be used for reference to future-in the-past. The extract below is from a story about how "gringos" tried to move a stone figure from the ruins of Bonampak to a museum in Mexico City. According to KYYM, who is the narrator, they could not lift the large stone because the God who watched over it would not let them take it.



(4.9) a *kaj ka7 t-uy-a7r-aj-Ø*  
 SUB when COM-3SG.A-say-CP-3SG.B  
 ‘The foreigners then said,’

b *b'in u-ka7 ch'a7-b'ir ti7 kir uy-ir-ik-Ø*  
 FUT2 3SG.A-do carry-PARTIC PREP SUB.2 3SG.A-see-PLN-3SG.B

*ich museeo uhch*  
 LOC museum(Sp.) before.EXCL

‘It was going to be carried (away) so that it could be seen in the museum’

[HB050211\_1KYYM\_4]

Although the following verb carries a future participle, it essentially works in the same way as a regular construction that takes the dependent status. The discussion in section 5 focuses on the relevant features of meaning in *b'i(h)n* and are viewed from a pragmatic perspective that reveals the motivations underlying the use of *b'i(h)n* as opposed to other forms that traditionally also are considered as “future” forms.

## 4.2 Particles

As stated in section 2.4, there is a word class in Mayan languages that Kaufman (1990, 1991) calls *particles*. The particle word class is large and heterogeneous and it is defined negatively in that the members of the class do not take inflection or stress (Kaufman 1990:74). This statement means, more precisely, that particles are unavailable for inflectional and derivational processes that allow them to function as fully inflected verb phrases, and also that they are unavailable for possession and person inflection, like nouns.

The classification of vocabulary is a tricky business, but a desirable one, since a fine-grained lexical classification can help explain many grammatical phenomena that otherwise would appear irregular or even random. Lakandon Maya is of course no exception. However, the boundaries are often less clear than one would like, and some groups of words appear to belong to more than one class, i.e. some verbs also function as nouns and vice versa as exemplified in the “active verbal nouns”, or “action nouns” (*avn*; see also section 2.4.2.1). As in most languages, nouns are also easily derived into other functions such as transitive verbs (see also section 2.4.3.7). Adjectives are converted into verbal predicates by similar, but distinct means (*ibid*).

In examples (4.10-4.13) below, the transitivity of 1) an intransitive verb, 2) a noun (*avn*), and 3) an adjective is presented to illustrate three processes whereby

predicate roots can be turned into transitive verbs. This process is not available for particles and thereby contrasts predicates belonging to the inflectional classes, to particles like *je7r(-a7)*, ('this'), which although it functions like a predicate by itself (*je7ra7* – 'this is the one', 'that's it'), is impossible to transform into a fully inflected verb.

*jo7k'* – 'go out', 'leave' (iv)

(4.10) *k-u-jo7k'-s-ik-Ø*

INC-3SG.A-leave-CAUS-PLN-3SG.B

'He takes it out'

*tz'ihb'* – 'writing'/'write' (avn)

(4.12) *k-u-tz'ihb'-t-ik-Ø*

INC-3SG.A-writing-TR-PLN-3SG.B

'He writes it'

*säk* – 'white' (adj)

(4.13) *k-u-säk-kin-t-ik-Ø*

INC-3SG.A-white-CONV-PLN-3SG.B

'He whitens it'

*je7r(-TD)* – 'this/that'

(4.14)a \*\**k-u-je7r(-a7)-s-ik-Ø*

INC-3SG.A-this(-TD.PROX)-CAUS-PLN-3SG.B

b \*\**k-u-je7r(-a7)-t-ik-Ø*

INC-3SG.A-this(-TD.PROX)-TR-PLN-3SG.B

c \*\**k-u-je7r(-a7)-kin-t-ik-Ø*

INC-3SG.A- this(-TD.PROX)-CONV-PLN-3SG.B

According to the definition above, a particle could neither be possessed nor inflected for person as a noun or an adjective could. There do however appear to be some exceptions to this rule, which may affect the classification of particles. This will be discussed below.

Kaufman (1990) argues that particles can be classified on syntactic and semantic grounds. He gives examples of seven sub-classes that are based on the syntactic properties of particles:

- 1) question words and demonstratives
- 2) aspect markers
- 3) other particles connected to verbal and non-verbal predicates
- 4) particles used in the formation of noun phrases
- 5) coordinators
- 6) subordinators
- 7) discourse connectives

(Kaufman 1990: 74-75 [my translation])

Kaufman's classification contains two familiar word classes from English, i.e. adverbs and pronouns, many of which basically function as predicates in themselves (sub-classes 1 and 2). Other members are bound and semi-bound morphemes in the form of affixes and clitics (sub-classes 2-4), and some lexemes that operate on a higher level, connecting and relating phrases and sentences to one another (sub-classes 5-7).

The members of sub-class 1 and 2, i.e. adverbs, (some) pronoun forms and AM-markers are the ones that mainly will concern us in the present investigation. The members of sub-classes 3-7 are basically morphological and syntactic operators that (mostly) lack inherent meaning outside of the one they acquire in the context where they function.

Kaufman concludes his presentation of the particle class by saying that there is a large number of particles in any given Mayan language and that "understanding their function and use is one of the most time consuming tasks in the description of Mayan languages" (ibid: 75).

Bricker et al. (1998) use the same label as Kaufman, but also call them "function words" (Bricker et al. 1998: 382) and simply divides them by form, i.e. by syllable structure and by their combinatory possibilities such as compounding and derivation by reduplication.

A more in-depth classification of the particles that pertain to temporal reference in Lakandon is a necessary requirement for the present investigation. Two questions especially, need to be answered regarding the grammatical properties of time words: 1) what is the class membership of a specific time word, i.e. is it a particle or does it belong to another word class, and 2) what are its morpho-syntactic possibilities? In many cases, the grammatical properties will determine the class membership of a given

word, but they should nevertheless be kept separate because of the relative complexity of the particle word class.

#### 4.2.1 Particles and the Verb

In the sub-classification of the particle word class, an important parameter seems to be how a particle interacts with the verb. Commonsensically, and as stated at the outset of this chapter, all time reference in Lakandon is linked to the verb by varying degrees.

Kaufman's general classification of the particle word class in Mayan languages presented above, does not contain a complete specification of the relationship a particle has to other word classes, such as verbs, and one may therefore think that all "question words and demonstratives" of sub-class 1, behave in the same way just from being part of the same sub-class. Kaufman's second group, "aspect markers" also appear as distinct from the first, but as Bohnemeyer observes, AM-markers in Yukatek are originally members the verb class and still function as stative predicates (see section 4.1.2, above)

As seen in section 4.1, it is possible to place stative verbs as well as adverb-like particles in the slot of the AM-marker within a verb phrase. The grammatical status of an AM-marker is determined by its exclusive connection to a specific status marker and by being mutually exclusive to the aspect prefixes *k-* and *t-* (cognates of the core members of Kaufman's second grouping).

There are four possibilities for particles in combining with the verb phrase: 1) as a pre-positioned auxiliary element (i.e. AM-marker); 2) as an incorporated adverbial; 3) as a (neutrally) phrase final adverb that can be placed in a fronted focus position; and 4) as a pre-positioned AM-marker that also can be incorporated into the verb phrase. These positions are exemplified below, respectively:

- (4.15) *tz'o7k in-wutz'-ik-Ø in-naar*  
 TERM 1SG.A-double.over-PLN-3SG.B 1SG.A-maize  
 'I finished doubling over my maize'  
 [HB040904\_1EChK\_8]

- (4.16) *como aw-eer ma7 nuuk u-køj chan ch'ämäk-e7*  
 like(Sp.) 2SG.A-know NEG1 big 3SG.A-tooth small skunk-TD.ANA  
 'As you know, the teeth of the little skunk are not big'

*tak u-jach=tok=noot-ik-Ø u-che7 u-kaar waakäx*  
 DES 3SG.A-really=just=gnaw-PLN-3SG.B 3SG.A-raw 3SG.A-neck cow  
 ‘he has to gnaw at the neck of the cow’

[HB040905\_2EChK\_5]

(4.17)a *t-inw-ir-aj-Ø a-teet 7uhch*  
 COM-1SG.A-see-CP-3SG.B 2SG.A-F before.EXCL  
 ‘I saw your father some time ago’

b *7uhch(-ik) t-inw-ir-aj-Ø a-teet*  
 before.EXCL(-ADV.FOC) COM-1SG.A-see-CP-3SG.B 2SG.A-F  
 ‘Some time ago, I saw your father’

(4.18)a *y-a7r-aj-Ø u-comisaria [...], bueno*  
 3SG.A-say-CP-3SG.B 3SG.A-commisary [...] very.well(Sp.)

*yaan a-käx-t-ik-Ø tah b'in-e7x kajar tuhn*  
 OBL 2SG.A-find-TR-PLN-3SG.B SP.R.DIST go-2PL.B village then  
 ‘The commissary said: alright, you have to find (a place) where you can go.’

[HB040905\_2EChK\_2]

b *t-a-yaan=b'aj-aj-Ø y-ook*  
 COM-2SG.A-OBL=plant-CP-3SG.B 3SG.A-pole  
 ‘You have to plant the pole (into the ground)’

[HB040905\_2EChK\_3]

As the examples (4.15-4.18) demonstrate, AM-markers and adverbs show varying degrees of mobility within the verb phrase. The syntactic properties of these markers are however not very stable, meaning that they may vary even across the two dialects NL and SL.

#### 4.2.1.1 *tz'o7k*

The AM-marker in (4.15), *tz'o7k*, clearly betrays its origin as an intransitive verb. Although *tz'o7k* is unavailable for person-status inflection in its function as an AM-marker, it can be inflected by those markers as an independent intransitive verb, as seen in (4.19):

(4.19) *entonces y-a7r-aj k-u-tz'o7k-or*  
 then(Sp.) 3SG.A-say-CP INC-3SG.A-finish-PLN.IV  
 ‘So he said that he is finishing’

[HB040904\_1EChK\_6]

*tz'o7k* can also be derived with the nominalising suffix *-ir*. The resulting form, *tz'o7kir*, then functions as a freestanding adverb:

- (4.20) *entonces ka7 u-k'äb' k'iin ka7 jach ka7=suut-een ich naja*  
 then(Sp.) two 3SG.A-hand day when really again=go.back LOC Naja  
 'Then it took ten days until I went back to Najá'

*entonces ya tz'o7kir tuhn ka7 uhr-een...*  
 then(Sp.) already(Sp.) finished then when return-1SG.B  
 'Then, after I had finished coming back...'

[HB040905\_2EChK\_2]

#### 4.2.1.2 *tok*

The second syntactic slot, seen in (4.16), is exemplified by the incorporated adverbial *tok*, which is found exclusively in this position in SL, while in NL it has a greater mobility and can also be found outside of the verb phrase. Compare (4.21) with (4.22) below:

NL:

- (4.21) *t-inw-ahn-t(-ik)-eech t-a-juhch' toj*  
 DUR-1SG.A-help-TR(-PLN)-2SG.B PREP-2SG.A-grind just  
 'I will help you grind,'

*ma7 taar-a7n a-taar t-a-juhch'*  
 NEG1 come-PARTC1 2SG.A-come PREP-2SG.A-grind  
 "'you never come to grind"'

[HB040917\_1EChK\_9]

SL:

- (4.22) *ma7 tok=b'in-een ich san.kristoob'al 7uhch*  
 NEG1 already=go-1SG.B LOC TN before.EXCL  
 'I hadn't been to San Cristóbal then'

[HB050225\_1KYYM\_3]

The form *toj* in (4.21) appears to be a phonologically leniated form of *tok* that results from its phrase final position, but a comparison to Itzaj and Colonial Yukatek where *toj* and *to* are attested makes it seem possible that the situation is reversed and that the *-k* in *tok* has arisen from a novel placement within the phrase. More will be said about this in 4.2.2, below.

The syntactic contrast in the placement of *tok* between NL (4.21) and SL (4.22) is between: a phrase final position (4.21) as opposed to being incorporated between the negative marker *ma7* and the main verb (4.22). From these examples it appears that a strict classification of *tok* according to possible syntactic placement must be made differently in NL and SL.

As an incorporated modifier in SL, *tok* can be reduplicated to appear in imperative expressions such as the one in (4.23) below (here the *-j* occurs in order to avoid a */-k-k'/* consonant cluster):

- (4.23) *too=toj=k'äy-ej-Ø*  
 REDUP=just=sing.it-IMP-3SG.B  
 'Sing it! (the song you know)'  
 [HB050211\_3KYYM\_3]

#### 4.2.1.3 *7uhch*

The third position available is a common one. The modifiers that share this syntactic position are called adverbs by Bohnemeyer (1998) and are members of the first group of particles in Kaufman's scheme (section 4.2, above). It is the members of this group that put into question the strict division between AM-markers and adverbs that is generally favoured in grammatical descriptions of Yukatek. In Lakandon Maya, at least two of the temporal distance markers, *7uhch* and *sahm*, occur more often as freestanding adverbs than they do as AM-markers.

This was a surprise to me initially since the descriptions I had read about cognates of these two markers in Yukatek and Itzaj bore very little resemblance to what I found in Lakandon. Of course, the main difference between the two uses lies with the status inflection of the main verb of the phrase. If *7uhch* or *sahm* occur before a verb phrase in the dependent status, they are distance-, or AM-markers. If on the other hand they are placed before a verb phrase in the plain or completive status, then they function as adverbs. Compare the examples below where (4.24) has *7uhchik* as an AM-marker and (4.25) shows *7uhchik* as an adverbial in focus position:

- (4.24) *7uhch-ik saj-ak ma7 mahk k-u-na7k-ar*  
 REM-ADV.FOC scare-DEP.IV NEG1 people INC-3SG.A-go.up-PLN.IV  
 'Long ago, they were afraid, no one entered'

*7ich uy-atooch ik-nuukir-o7*  
 LOC 3SG.A-house 1PL.A-ancestors-TD.DIST  
 ‘the house of the ancestors (i.e. the ruins of Yaxchilan)’  
 [HB040922\_1EChK\_4]

(4.25) *7uhch-ik k-u-tzikb’a-t-ik-Ø 7in-miim*  
 before.EXCL-ADV.FOC INC-3SG.A-tell-TR-PLN-3SG.B 1SG.A-grandmother  
 ‘My grandmother used to tell (me)’  
 [HB040922\_1EChK\_4]

The fourth and final alternative for syntactic placement is when an AM-marker also can be incorporated into the verb phrase. This is an unusual kind of mobility for an AM-marker to have and it has only been attested for *yaan* in (4.18). There is a distinct difference between an adverbial particle like the previously described *toj/tok*, and the AM-marker *yaan* (OBL), which is the only attested member of the fourth group. Although *tok* has some mobility in NL, it is not an AM-marker because it can occur with verbs of *any* status. This is not the case with *yaan*, which has to take the plain status when it functions as an AM-marker (see 4.18a). Once incorporated, however, the status marking is of no importance.

#### 4.2.2 A comparison to Colonial Yukatek, Yukatek, and Itzaj

We have seen that particles are differently related to the verb phrase. Furthermore, it does not seem possible to make any collective generalisations regarding their development. Only individually do they reveal specific paths of change regarding syntactic status when compared to cognates of the same expressions in two of the other Yukatekan languages, Yukatek and Itzaj.

There is nothing unusual about the way that *tz’o7k* works in Lakandon when it is compared to the same AM-marker in Yukatek and Itzaj. In all three languages it still has a function as an intransitive verb, but with regard to its status as an AM-marker it appears that there has been a shift in one dialect of Yukatek, namely the Hocabá dialect described by Bricker et al. (1998). *tz’o7k* takes the dependent status there, while in other dialects of Yukatek and in Lakandon and Itzaj, it takes the plain status.

Hofling (2000) describes *toj* (‘still’) for Itzaj, regarding it as a “positionally conditioned temporal adverb” (ibid: 335). In Itzaj, *toj* occurs phrase finally and does not appear to be available for incorporation. An isolated form of *toj/tok* is not attested for modern Yukatek (cf. Bricker et al. 1998; Bohnemeyer 1998; Hanks 1990; Vapnarsky



1999) although it is possible that *toj* can be found within the adverbial expression *tahntoj* ('just', 'immediately before'), which in the form of an AM-marker is shortened to *tahnt*. The two forms, *tahntoj* and *tahnt* share the same meaning and it is possible that *tahntoj* could be analysed as *tahn=toj*, consisting of the relational noun/AM-marker '(in)front'/'DUR' and the particle meaning 'still'.

There was a particle, *to*, in Colonial Yukatek (McQuown 1967: 244) also meaning 'still' suggesting that both Itzaj and Lakandon kept it while it was lost in modern Yukatek.

Despite *toj/tok*'s absence in modern Yukatek, one may draw the tentative conclusion that *toj* has become available for incorporation in Lakandon (exclusively so in SL) from previously having functioned as a freestanding temporal particle, which is a function that is attested for Itzaj and Northern Lakandon. The path of grammaticalisation is then: phrase-final adverbial > incorporated adverbial.

A different situation has arisen with regard to the grammatical status of *7uhch*, which in Yukatek still works as a stative verb, meaning 'to happen' (see also section 6.2). In Itzaj, the cognate *7uch* has the same meaning and function. Only in Lakandon has *7uhch* lost its function as a verb. The intransitive root *mahn* ('go by', 'happen') has assumed part of this function.

The verbal forms available with *7uhch/7uch* in Yukatek and Itzaj are presented below:

#### YUK

- (4.26) *b'a7x k-uy-uhch-ul*  
 what INC-3SG.A-happen-PLN.IV  
 'What's wrong?'  
 (Bricker et al. 1998: 20 [my orthographic adjustments])

#### ITZ

- (4.27) *b'ix uy-uch-ul a-meyaj-oo7 wa7ye7 kil u-k'och-ol*  
 what 3SG.A-happen-PLN.IV DET-work-PL here when 3SG.A-arrive-PLN.IV  
  
*a7-mes-il 7agoostoj*  
 DET-month-NOM August  
 'What happens to the jobs when the month of August arrives?'  
 (Hofling 2000: 648 [my orthographic adjustments])

Constructions similar to the ones seen in (4.26) and (4.27) are rejected by Lakandon speakers from both dialects. *7uhch* has only been attested for Lakandon in the form of

the AM-marker and the freestanding adverb exemplified in (4.17a-b), the latter of which is also present in Yukatek and Itzaj (section 6.2).

Given the original function and status of *7uhch*, we see evidence for the grammaticalisation of a content word belonging to one of the core word classes into a function word, i.e. adverb with a modifying function.

The attested function of *yaan* in Yukatek and Itzaj is in the form of an AM-marker and an existential stative predicate that is available for person-number inflection but which does not take AM-, nor status marking like regular verbs:

- (4.28) *b'ahb'i yaan-Ø uy-äräk' peek'*  
 PN EXIST-3SG.B 3SG.A-CL.pet dog  
*ich san.kristoob'al uhch*  
 LOC TN before.EXCL  
 'Bobby had dogs in San Cristóbal (de las Casas) then'  
 [HB050225\_1KYYM\_3]

The function of *yaan* as an AM-marker was exemplified in (4.18), repeated here:

- (4.18)a *y-a7r-aj u-comisaria [...], bweno yaan*  
 3SG.A-say-CP 3SG.A-commisary [...] alright(Sp.) OBL  
*a-käx-t-ik-Ø tah b'in-e7x kajar tuhn*  
 2SG.A-find-TR-PLN-3SG.B SP.R.DIST go-2PL.B village then  
 'The commissary said: 'Alright, you have to find (a place) where you can go'.'  
 [HB040905\_2EChK\_2]

There are no attested instances of *yaan* in the form of an incorporated adverbial modifier in Itzaj or Yukatek, as we saw for Lakandon in (4.18b), but the change in syntactic status is similar to what we saw for the adverb-particle *toj/tok*.

It thus seems that we have two general paths of grammaticalisation where verbs can be turned into stative predicates with a modifying function, but not into incorporated modifiers. Freestanding particles such as *toj/tok*, and the existential predicate *yaan* can become available for incorporation even though the latter functions as an AM-marker first. This last process is not attested for the other Yukatekan languages.

To summarise, the comparison of the particles above suggests that they are best classified according to their origin, which is visible from a comparison across the

Yukatekan languages of their present functions. Some particles were proper verbs before they acquired a function as a modifier (i.e. stative predicate), while others only ever had a function as a freestanding particle for all that can be ascertained. The discussed particles are consequently available for distinct syntactic positions depending on their original function.

### **4.3 Time words in Lakandon**

Bohnmeyer (1998) identifies three groups of temporality markers in Yukatek. He does not consider Kaufman's classification scheme and thus makes no use of the term "particle", but at least the third group, corresponds directly to the first two classes in Kaufman's sub-classification (section 4.2). The three groups are: 1) temporal distance markers (e.g. *7uhch*, *sahm*), 2) phase verbs (*tz'o7k*, *chuhn*), and 3) temporal adverbs (*ka7ch*, *b'aje7*),

As we have seen in section 4.2.1, the distance markers and the phase verbs are stative verbs or intransitive roots that function together with a fully inflected verb, whereas the temporal adverbs are a different kind of particle. However, as we also have seen, this distinction is not always transparent. The present section will therefore attempt a classification along the lines proposed above in section 4.2.1.

#### **4.3.1 Temporal distance markers**

Bohnmeyer discusses four temporal distance markers for Yukatek: 1) *7uhch* ('before'), 2) *sahm* ('recently'), 3) *tahnt* ('just'), and 4) *ta7itak* ('immediately before'). Of these four markers, three have been attested for Lakandon, namely numbers 1-3.

Bohnmeyer observes that *7uhch* and *sahm* betray an origin as stative verbs and that they also can occur with some verbal morphology and be inflected for person. These verbal features are however not reflected in their function as distance markers as we saw above in 4.2.1. Neither *7uhch*, nor *sahm* have, as already stated, been attested as independent verbs in Lakandon.

Temporal distance markers are, as stated in section 4.1, connected to specific status markers. *7uhch* and *sahm*, for example, can only be used with the dependent status, which clearly reflects their verbal origin since both markers function as verbs that take the verb they modify as an argument.

*tahnt*, on the other hand, combines with the plain status and is thus separated from *7uhch* and *sahm* as stative predicates. The origin of *tahnt* is not clear but it is part of the

temporal distance marker paradigm on syntactic and semantic grounds. Syntactically it is placed directly in front of a fully inflected verb phrase, just like *7uhch* and *sahm*, but it is more restricted than *7uhch* and *sahm* since it cannot occupy other positions in the verb phrase as a freestanding adverb, something that we saw was possible for both *7uhch* and *sahm* (section 4.2). Morphologically, *tahnt* functions like another time adverb, *tahb'ar* ('soon', 'almost'), which also can be placed in front of a verb compound in the plain status as a free-standing adverbial marker.

Although Bohnemeyer does not include the "future marker" *b'ihn* in the temporal distance marker set, it could be argued on morpho-syntactic grounds that it is. Semantically, Bohnemeyer insists that there is no distance parameter in the semantics of *b'ihn* with regard to a location some time in the future. If the semantics are put aside for the moment, then there are at least two reasons for including *bihn* in the above-mentioned paradigm.

Firstly, *bihn* modifies verbs in the dependent status like *7uhch* and *sahm*. Secondly, it too has an origin as a verb, *b'in* meaning 'to go'. Although some languages, as noted by Dahl (1984) and Comrie (1985), divide the temporal distance between a speaker and an event in its tense forms relating to the past and sometimes also to the future, this is not the case for Lakandon or Yukatek since there is good reason to regard both languages as tense-less, as stated in 4.1.3, above. Considering this, perhaps not even the semantic content of *bihn* is sufficient for separating it from the distance markers relating to the past.

The modal future form is *je7..(-ik)-e7* which as suggested by the presence of *-ik*, combines with the plain status, thus making it more like *tahnt* and *tahb'ar*. A related form, *je7re7*, is considered to be a member of the ostensive deictic paradigm by Hanks (1984, 1990) and, like all other deictic forms, has a predicative function on its own.

#### 4.3.2 Phase verbs

Aspectual operators such as *tz'o7k* ('finish') and *chuhn* ('begin') are important expressions related to boundary information. They are common in task-oriented speech, as recorded and analysed by Bohnemeyer for Yukatek but in my corpus, which is more oriented towards narratives and spontaneous dialogue, only *tz'o7k* has any significant function in delimiting an event from a following one in the form of *tz'o7kir*. *chuhn* is completely absent from my sample as an AM-marker and I have failed to come up with a substitute aspect marker in elicitation. Phase verbs play a limited role in the

investigation of temporal reference from a deictic perspective anyway, since their temporal function is more concerned with event structure, i.e. aspect, than time deixis.

As we saw above in 4.2.1, the aspectual operator *tz'o7k* has a derived form in the nominalised marker, *tz'o7kir* ('after that', 'afterwards'), that makes reference to *temporal sequence*, which is one important role that deictic particles can play. This form and function of *tz'o7k* should, however, not be confused with its function as a phase verb or aspectual marker.

### 4.3.3 Temporal adverbs

Temporal adverbs are time words that clearly fall into sub-class 1 of the particle word class as defined by Kaufman. These particles/adverbs share morpho-syntactic traits with other non-temporal particles that are defined with regard to distribution and morphology as question words, pronoun forms and adverbs. Essentially, they lack the possibility to combine with morphemes other than topicalisation pre- and suffixes, and function as freestanding clitics that usually modify an entire phrase. Examples are; *b'aje7(re7)* ('now'), *tuhn* ('then'), and *ka7ch/kuhch* ('before', 'long ago').

Adverb-like particles are as we saw above in 4.2.1 permitted to occupy three positions within a phrase that they modify. They can be placed *neutrally*, i.e. immediately after the verb phrase or phrase finally (4.29); first in a phrase in *focus position*, sometimes carrying the *-ik* focus suffix (NL; 4.30)); or in a *topicalised position*, which means a phrase initial placement, but one that requires topicalisation markers (4.31). These syntactic positions are exemplified below:

- (4.29) *aw-eer*            *mana7*        *ch'upraj*    *uhch*  
 2SG.A-know    NEG.EXIST woman        before.EXCL  
 'You know, there were no women before'  
 [HB040917\_1EChK\_12]

- (4.30) *uhch-ik*                            *ma7 inw-eer*        *chuhna7*    *cheen*    *in-raak'*  
 before.EXCL-ADV.FOC    NEG1 1SG.A-know    begin        only(?)    1SG.A-H  
  
*u-ka7an-s-een*  
 3SG-A-teach-CAUS-1SG.B  
 'Before, I didn't know how to begin, my husband had to teach me.'  
 [HB041025\_1ChN\_1]

- (4.31) *a-uhch*                      *a-teen*                      *ti7*    *ka7n-een*    *ich*    *Naja7*  
 DET-before.EXCL   DET-1SG.IND   LOC   live-1SG.B   in   Naja  
 ‘Before, I used to live in Najá  
 [HB040915\_1GKY\_3]

Some time words are, however, better thought of as discourse markers and can only occur in phrase-final position. This is, for example, the case with *tuhn* (‘then’) and *-we7* (‘then, because of this’). *(-)we7* is a special case since it can combine with other time words and modality markers to form compound expressions. One such expression that will be investigated in more detail in the section below is *ab’ahywo7* (‘now, because of this’). This expression is formed with *we7* although what remains of it, is the *-w-* because of morpho-phonological processes (see also section 5.5.1).

Discourse particles that have a function in temporal reference constitute a separate sub-class and are not time words as such (i.e. they lack lexical meaning but only acquire one in context), although they do play a part in an account of time reference in Lakandon.

Fraser (1999) investigates discourse markers in English and argues that they “do not constitute a separate syntactic category” (Fraser 1999: 943). He identifies three different sources of discourse markers in *conjunctions*, *adverbs* and *prepositional phrases* along with some idioms. Discourse markers are further separated into two groups: one relates *messages* (contrastively, collaterally, or inferentially) and the other relates *topics*.

Discourse markers are a pragmatic class that mainly “signal a relationship between the segment they introduce, S2, and the prior segment, S1. They have a core meaning which is procedural, not conceptual, and their more specific interpretation is ‘negotiated’ by the context, both linguistic and conceptual.” (ibid: 946)

From the definition provided by Fraser, *tuhn*, *tok*, and *we7* appear more like discourse markers than time words, but the function they have in relating two events (in discourse or conceptually) makes them relevant to the description of proper time words and it indicates a connection between the two.

*7uhch* and *sahm* are, as we saw above, temporal distance markers that also function as adverbs. As adverbs they can occupy all three possible slots in the verb phrase and are free to modify phrases that are inflected for any status, not only the dependent status that is available for them as distance markers (cf. exx 4.29-4.31).

There are also considerable semantic differences between *7uhch* as a distance marker and an adverb.

Some adverbs, both temporal and non-temporal, can be inflected for person like a stative predicate. In this respect they appear more like noun-adjectives than verbs. Examples of such noun-like expressions are *b'iktahb'ar* ('how') and *su7=su7* ('often'):

- (4.32) *este b'iktahb'ar-e7x a-k'uj-in-t-ik-Ø-e7x k'uj*  
 so(Sp.) how-2PL.B 2SG.A-god-CEL-TR-PLN-3SG.B-2PL.B god  
 'How they worshipped their Gods'  
 [HB041028\_1CChKY\_1]

- (4.33) *a-teech.e7x-e7 su7=su7-e7x*  
 DET-2PL.IND-TOP REDUP=often-2PL.B
- kaj taar-e7x a-käx-t-ej-Ø tzimin*  
 SUB come-2PL.B 2SG.A-find-TR-DEP-3SG.B horse  
 'You guys always come looking to find horses.'  
 [ALIM questionnaire MChKY e-0472]

Although *b'iktahb'ar* and *su7su7* are noun-like by allowing person-number marking they cannot be possessed like regular nouns:

- (4.34)a *\*\*7u-su7su7(-ir)*  
 3SG.A-REDUP=often(-NOM)
- b *\*\*7u-b'iktahb'ar(-ir)*  
 3SG.A-how(-NOM)

From the discussion so far, both in section 4.2 and in the present section, it appears that time words in Lakandon Maya can be tentatively grouped from the criteria discussed above with regard to syntactic placement, origin, and inflectional availability:

**Group 1:** *7uhch* and *sahm* are the only members here. They function as both distance markers and as *adverbs* and are therefore verbal-like particles, given their two functions and their demonstrated origin.

**Group 2:** The second group consists of, *ka7ch/kuhch*; *b'aje7(re7)*; *tahb'ar*; *b'ahywo7*; and *sahnsam*. These adverbs have no alternative functions and betray no clear verbal origin, with the exception of *tahb'ar*, which in some cases looks like *tahnt* (group four) since it can be placed in the auxiliary position in front of a fully inflected

verb phrase. Semantically, they are all deictic in that they serve to position the speaker with regard to some state of affairs.

**Group 3:** The third group has three members, *tuhn*, *tok*, and *we7*, that are more like discourse particles than modifying adverbs. However, *we7* can combine equally with single lexemes to form compound, temporalised expressions, separating it somewhat from *tuhn*. Distribution-wise, they look very similar and they are both dependent on other elements, which excludes them from being regarded as independent lexemes.

**Group 4:** A fourth grouping essentially consists of auxiliary AM-markers such as, *je7...e7*, *b'ihn*, and *tahnt*. They are not adverbs, but belong to the particle word class. They are closely linked to the members of Group 1, in one of the functions of the members of that group as distance markers.

**Group 5:** The expressions that remain are distinguished as a separate group by their noun-like form: *tz'o7kir* ('after that'), *sahmin* ('a while later'), and *pahchir* ('later') are all derived into a form resembling a noun, but with the function of an adverb, by taking the *-ir/-in* suffix. Their origins are easily spotted: *pahchir* is derived from a relational noun, meaning 'behind' (*paach*); *tz'o7kir* comes from the phase verb *tz'o7k*; and *sahmin* is of course derived from the adverb/distance marker *sahm*. Another member of the group is *su7su7* ('often'), which has a distinct origin since it can be inflected for person like a non-verbal predicate.

A different kind of categorisation is one based on semantic and pragmatic criteria. Chapter 5 contains an effort to understand the semantic content of some of the particles presented above. The contexts in which they are used and the motivations behind their distribution will provide a better understanding of both time deixis and the specific forms that have as their main function to orient the speaker with regard to a temporal context and temporally situated eventualities.

## 4.4 Deictics

Before we turn to a description of the semantics of deictic time words in Lakandon Maya, an account of the grammatical features of the deictic forms for *space* and *ostension* must be included. There are at least two reasons for this: deictic time words have a conceptual meaning and function that makes them a part of the deictic paradigm, although *by form* they appear to be outside of it. Another reason is that comparisons of the semantics of specific time words in Lakandon to cognates in other Yukatekan



languages require a full account of, and a familiarity with the deictic paradigm. Following this, I discuss Yukatek deictic forms in 4.4.1 and the Lakandon equivalents in 4.4.2.

#### 4.4.1 Deictics in Yukatek

All Yukatekan languages have deictic forms that consist of an initial deictic stem (ID) and a terminal deictic suffix (TD). The ID stem varies depending on what dimension the act of reference is made in. Reference to a place can be made with the ID form *te7-*, and if one wants to direct the addressee's attention to some object, then the ostensive ID *je7-* can be used. There are other ID stems as well, notably the *way-* and *tol-* for the domain of space in Yukatek, and the nominal deictics *le7-*, also found in Yukatek.

The deictic forms for person and participants are different in form although they share many important semantic features with the rest of the deictic paradigm. Section 2.4.3.2 discusses the form and function of person and participant marking in Lakandon with frequent reference to Yukatek.

Naturally, the combination of ID and TD forms display different features of meaning depending on which ID is used. Therefore, the presentation of the forms is made in separate sections. The examples in 4.4.1.1 and 4.4.1.2 are all from Yukatek Maya with sources stated below each example.

##### 4.4.1.1 Ostensive deictics in Yukatek

The table below illustrates forms that are used to point out an object or a person in relation to the speaker and the addressee. They consist of the ID; *je7-*, indicating the ostensive nature of the form, and the TDs; *-a7*, *-o7*, *-e7*, *-b'e7*, that describe the speaker's and addressee's access to the object or person referred to. Combined they form the expressions presented in table 4.3:

'this one' (Tactual)	'that one' (Visual)	Assurative	'that one' (Sensory)
<i>je7(l)-a7</i>	<i>je7(l)-o7</i>	<i>je7(l)-e7</i>	<i>je7-b'e7</i>

TABLE 4.3 OSTENSIVE DEICTICS IN YUKATEK MAYA (after Hanks 1983)

The TDs, *-a7* and *-o7* have traditionally been described as *proximal* and *distal* markers dividing the distance between the speaker (ground) and the object (figure).

Hanks (1990), however, argues that there is an *evidential core* (as indicated by the glosses in the table) in the ostensive deictics of Yukatek. *Tactual*-, *visual*-, and *sensory access* are salient features of deictics that traditionally were described only in terms of proximity and distance. While *-a7* and *-o7* signal tactual and visual access, respectively, the TD *-b'e7* is used to indicate non-visual access to an object by other senses such as smell and hearing.

In addition, the *symmetries* between the speech participants with regard to the object (i.e. the indexical ground) are also expressed in the choice of TDs. Both *-a7* and *-o7* serve to situate the speech participants differently to the object in terms of *access* and *attention*.

- (4.35) *je7el-a7 p'o7-Ø a-k'ab'-i7=i7*  
 OST-TD.P wash.IMP-3SG.B 2SG.A-hand-REDUP=TD.LOC  
 'Here, wash your hands there.'  
 (Hanks 1990: 267 (BB.4.80) [my glossing and orthographic adjustments])

Example (4.35) is a statement that was uttered when the addressee (Hanks) was washing his hands a few meters away from the speaker, who offered him a hose that she was holding, for him to wash his hands under instead. The use of the TD *-a7* indicates two things; first a tactual access that the speaker has to the object, and secondly an asymmetry between the speaker and the addressee in that the hose was out of reach to the addressee.

Example (4.36) displays the *-o7* form, which exemplifies visual access paired with access symmetry where the speaker points to something that is equally visible to the addressee.

- (4.36) *je7el-o7 t-aw-il-ik-Ø*  
 OST-TD.D DUR-2SG.A-see-PLN-3SG.B  
 'There it is (look! pointing). Do you see it?'  
 (ibid: 274 (BB.5.29) [my glossing and orthographic adjustments])

The set of TDs available for other ID bases, such as *te7-* and *le7-* does not include all of those available for the ostensive forms, but some of the same semantic parameters are relevant for both dimensions of reference.

#### 4.4.1.2 Spatial deictics in Yukatek

The deictic forms for space in Yukatek are divided into two sets of IDs where one is *socio-centric* and the other *ego-centric* (Hanks 1990). The socio-centric deictics relate the proximity and accessibility to a place relative to the speaker and the addressee, whereas the ego-centric ones make reference to socially negotiated regions of inclusion and exclusion that pertain to the speaker. In addition to, and outside of these two sets, there is a marker *ti7* that is used to make unspecified reference to a place or a region. The forms are summarised in table 4 below:

Ego-centric		Socio-centric		Non-concrete	
'here'	<i>way-e7</i>	'here'	<i>te7l-a7</i>	-	-
'there'	<i>tol-o7</i>	'there'	<i>te7l-o7</i>	'there'	<i>ti7(-i7)</i>

TABLE 4.4 DEICTICS FOR SPACE IN YUKATEK (after Hanks 1990: 400)

The egocentric forms specify either the *inclusion* or *exclusion* of a location with regard to the extended body space of the speaker. There is no relevant situational context involving the speaker and the addressee as speech participants in the ego-centric forms. They only make reference to culturally defined areas relative to the speaker.

All deictics can be either continuous as seen in (4.35) and (4.36), or they can be discontinuous with lexemes or phrases occurring between the ID and the TD as demonstrated in (4.37). Both variants are present in (4.38):

- (4.37) *je7 way a-ku(l)-tal-e7x-e7*  
 OST SP.R.INCL 2SG.A-sit-ASSUM-2PL.B-TD  
 'Here you can sit right here'

(ibid: 407) [my glossing and orthographic adjustments]

- (4.38) *xe(h)n tol-o7 tahn uy-uk'-ul,*  
 go.IMP SP.R.EXCL-TD.DIST DUR 3SG.A-drink-PLN.IV  
 'Go over there. He's having supper,'

*xehn to ich naj-o7*  
 go.IMP SP.R.EXCL LOC house-TD.DIST  
 'go over there in his house'

(ibid: 419) [my glossing and orthographic adjustments]

The socio-centric forms are best understood in terms of *immediate* (4.39) and *non-immediate* (4.40). They refer to points within or outside of the body space of the speaker in contrast to the "regional" ego-centric forms. The socio-centric *te7la7* and *te7lo7* also

contrast with the latter forms by being weighted towards either the speaker or the addressee, thus revealing (a)symmetries between the speech participants with regard to the figure, a semantic feature they share with the OSTEV forms in section 4.4.1.1 (see also Hanks 1990, chapter 6).

- (4.39) *te7 a-taal-a7 wihl, ko7x jana*  
 SP.SC 2SG.A-come-TD.PROX PN come.IMP eat  
 ‘Come right here Will. Let’s eat.’

(ibid: 425, [my glossing and orthographic adjustments])

- (4.40) *xehn te7l-o7 ma7 a-suut*  
 go.away.IMP SP.SC-TD.DIST NEG1 2SG.A-return  
 ‘Go over there, don’t return!’

(ibid: 441) [my glossing and orthographic adjustments]

The remaining form, *ti7(-i7)* makes anaphoric reference to a familiar place that is left unspecified for any of the semantic features present in the ego- and socio-centric forms.

- (4.41) *ti7 (7)an j-k’ihwik-e7*  
 SP.INDEF EXIST CLASS-market-TOP  
 ‘There it is (in the) market’

(ibid: 450) [my glossing and orthographic adjustments]

A description of the deictic forms for ostension and space in Yukatek serve a purpose in the present context since an account of the same deictic forms in Lakandon Maya, including time deictics, necessarily draws on such a description for an analysis of Lakandon deictics despite some changes that has occurred in Lakandon compared to Yukatek proper.

#### 4.4.2 Deictics in Lakandon Maya

This section will be divided like section 4.4.1, above. First out is a presentation of the ostensive paradigm, followed by the deictics for space. Section 4.4.3 summarises the two paradigms and how they compare between Yukatek and Lakandon.

##### 4.4.2.1 Ostensive deictics in Lakandon Maya

The set of ostensive deictics presented in section 4.4.1.1 has been largely preserved in Lakandon Maya. The attested forms are almost identical to what we see in Yukatek

although there has been an addition in the form *järaj*. The forms are presented in the table below:

'this one' (tactual)	'here it is' (presentative)	'that one' /agreement	assurative/discourse referential	'that one' (auditory)
<i>je7(r)-a7</i>	<i>järaj</i>	<i>je7(r)-o7</i>	<i>je7(r)-e7</i>	<i>je7x(-b'e7)</i>

TABLE 4.5 OSTENSIVE DEICTICS IN SOUTHERN LAKANDON

The presentative *järaj* (Sp. '¡aca tiene!'; Eng. 'here you are!') is clearly derived from *je7ra7*, but speakers insist that the former is separate from the latter not only in its pronunciation but also in its meaning.

The auditory *je7x(b'e7)* is exemplified in (4.42) and (4.43). Both examples were given in reply to my question regarding what *je7x* means and how it can be used in a sentence. If one compares the two examples, it appears that *b'e7* can be omitted in making reference to something by its sound as long as the ID form *je7x* is still present. This is in agreement with the attested omission of other TDs (i.e. *-a7* and *-o7*) depending on the context:

- (4.42) *je7x*            *k-u-taar*  
 OST.AUD    INC-3SG.A-come  
 'There it/he goes!' (you hear that he is coming)  
 [060916 MChKY]

- (4.43) *je7x*            *k-u-taar*            *kahro-b'e7*  
 OST.AUD    INC-3SG.A-come    car-TD.AUD  
 'There goes the car!' (you can hear it)  
 [060916 MChKY]

In yet another example *-b'e7* can be seen to appear without *je7x-*, making it equal to the other TDs in the sense that they can appear separated from ID forms and attach to any nominal form.

- (4.44) *k-u-taar*            *kahro-b'e7*  
 INC-3SG.A-come    car-TD.AUD  
 '(You hear that) the car is coming'  
 [060916 MChKY]

The ostensive forms can be continuous or discontinuous like any deictic construction in Yukatek (see section 4.4.1.2). Compare (4.45) and (4.46):

(4.45) *a-je7 ka7 bin xiik-eech ich ik-teet-a7*  
 DET-OSTwhen go go.DEP-2SG.B LOC 1PL.A-father-TD.PROX  
 ‘This time, when you go to our father’  
 [HB041028\_1CChKY\_1]

(4.46) *ir-ej-Ø u-k’aan=tohy je7r-o7 ti7 char-a7n*  
 see-DEP-3SG.B 3SG.A-hammock=spider OST-TD.DIST PREP lay-PARTC1  
 ‘It looked like a spider’s web, that’s where he lay’  
 [HB050211\_1KYYM\_1]

The indexical asymmetry present in the forms *je7ra7* and *je7ro7*, as reported by Hanks for Yukatek, also appears relevant to the description of the same forms in Lakandon Maya. In elicitation, a speaker provided me with examples to explain the difference in use of both forms. A hypothetical situation where two persons (me and him) were out looking for wild pigs in the jungle provided the situational context.

*je7ra7* is used if the speaker has a better view of the pig than the addressee, while *je7ro7* is used if the speaker and the addressee have an equally good view of it. The reported difference with regard to evidential access has yet to be confirmed for Lakandon, although it appears at least partly intact considering the meaning found in the *je7x-b’e7* form (auditory). The present investigation has not investigated the ostensive, nor the spatial deictics in the level of detail that would be required to completely map their meaning with regard to Hanks’ findings for Yukatek.

The form *jära7* (‘here you are’) constitutes a change in the ostensive set of forms since the “factual-presentative” *je7ra7*, of Yukatek, has produced a distinct form in Lakandon. The form *je7ro7* competes with *je7re7* in indicating agreement and/or assurance. Compare examples (4.47) and (4.48):

(4.47)a *xehn u7y-ej-Ø u-t’aan u-xu7r=t’aan,*  
 go.IMP listen-DEP-3SG.B 3SG.A-sound 3SG.A-end=sound  
 ‘Go listen to the end of the world!’

b *je7r-e7 teet kij k-u-b’in*  
 OST-TD.ANA father QUOT INC-3SG.A-go  
 ‘Alright dad, he said (and) went.’

[HB041028\_1CChKY\_1]

(4.48) *je7r-o7            maam   kuhx   maam*  
           OST-TD.DIST   ZH            come.IMPZH  
           ‘Alright buddy, let’s go, buddy’  
 [HB041028\_1CChKY\_4]

The decisive difference between the two forms lies in the anaphoric reference expressed by *je7re7*, which is lacking in *je7ro7*. The latter form is also used by speakers of SL to say goodbye. The idiomatic exchange, (SPKR) *-b’in inka7*, (ADR) *-je7ro7*, meaning ‘-I’m gonna go now’, ‘-OK’, is commonly used in leave-taking.

A different reply to *b’in inka7* is used by speakers of NL, who say: *xehn!*, meaning ‘(you may) go!’. *xehn* is also present in SL but there it has a meaning comparable to ‘go away!’ or ‘scram!’. It is consequently not used in leave-taking but functions more like a (rude) command to a dog, or sometimes to a child.

As a comment on the grammatical status of the ostensive deictics (not including the assurative *je7re7*), they also share the stative-predicative function that has been observed by Hanks for Yukatek with regard to person inflection on the forms as seen in (4.49). There the first person marker attaches directly to the ostensive ID to make ostensive reference to the speaker himself:

(4.49) *je7r-een-a7            raak’*  
           OST-1SG.B-TD.PROX friend  
           ‘Here I am, man!’  
 [HB041028\_1CChKY\_2]

#### 4.4.2.2 Spatial deictics in Lakandon Maya

The spatial deictics in Lakandon Maya are more divergent from the same deictics in Yukatek Maya than the ostensive set is. A detailed semantic analysis of these forms will not be attempted here for the simple reason it takes a great deal of time to map the semantics of the forms from a pragmatic perspective. This time was instead spent on analysing the temporal deictics. A presentation of the existing forms is despite this deficiency given in table 4.6:

Regional		Partitive		Non-concrete/familiar	
'here'	<i>way-e7</i>	'here'	<i>te7r-a7</i>	-	-
'there'	<i>tahr(-o7)</i>	'there'	<i>te7r-o7</i>	'there'	<i>ti7(-i7)</i>

TABLE 4.6 DEICTICS FOR SPACE IN LAKANDON MAYA

Almost all examples that I include here are from passages of text that are part of my corpus of texts. This means that I have very few instances of observed use of the forms outside of the recorded and analysed interview sessions. Such spontaneous observations are fundamental to Hanks' description of the forms in Yukatek. This, of course, makes my description very different from Hanks' both with regard to the level of detail and relative confidence with regard to the results.

This being said, there are still good reasons for using a grouping of the forms that is similar to Hanks' because the three existing sets warrant a separation in Lakandon too, although the exact motivations behind it are less clear and less precise than the ones Hanks offers for Yukatek.

To begin with, the forms that are called "partitive" in table 4.6 are the ones corresponding to Hanks' socio-centric forms (see table 4.4). In accordance with what Hanks observes for Yukatek, they can be both continuous and discontinuous but are not available for person inflection, which is the case for the ostensive forms (see section 4.4.2.1).

It appears that an important semantic feature of *te7ra7* and *te7ro7* is the division of some proximate (i.e. accessible) area into *immediate* and *non-immediate*. In example (4.50), the inhabited forest is divided according to this feature:

(4.50)a *a-te7*      *b'uenapak uhch-o7*      *a-te7*      *ich*  
 DET-SP.SC   TN      before.EXCL-TD.DIST DET-LOC.SC   LOC

*a-te7*      *u-kajar*      *lakanja7-a7...*  
 DET-SP.SC   3SG.A-village   TN-TD.PROX

'Here in Bonampak, before, (and) here in the village of Lacanjá...'

b *k-u-b'eet-ik-Ø*      *k-u-t'än-ik-Ø*      *k'uhj*      *jach tzooy*  
 INC-3SG.A-make-PLN-3SG.B   INC-3SG.A-speak-PLN-3SG.B   god   very good  
 'They made it, they said (words of) God, (it was) very good.'

[HB050211\_1KYYM\_4]

Although the area including the ruins of Bonampak is measurably more remote than the actual village of Lacanjá, where the speaker is situated at the moment of speech, I



believe that the use of the two forms in (4.50) is motivated by another separation, namely one between the place where the speaker and his family lives and a contrasting “immediate” place where several Lakandonos live, but where the speaker has no close relatives. With regard to a separation between *immediate to the speaker* vs. *immediate to the addressee*, I think that (4.50) is inconclusive since my role as the addressee is that of a stranger in Lacanjá and I really do not belong spatially anywhere within its parameter.

A second instance of *te7ro7* reveals a closer connection to a separation between the location of the speaker and that of the addressee. The example in (4.51) is an extract from a conversation between EChK and another speaker regarding the lack of running water in some areas of Lacanjá. The use of *te7ro7* refers to the area where the addressee lives and where the tank is also located. Note that the translation of *te7ro7* is ‘here’ (Sp. ‘aca’) indicating a level of immediacy although the location is somewhat remote from the speaker.

(4.51) A: *bueno a-tahj ma7 u-tok=sa7p’-är*  
 well(Sp.) DET-SP.R.DIST NEG1 3SG.A-just=dry.PASS2-PLN.IV

*a-ti7=taj*  
 DET-SP.INDEF=SP.R.DIST

*ma7 u-cheen=tok=sa7p’-är*  
 NEG1 3SG.A-only=just=dry.PASS2-PLN.IV  
 ‘So up there it hasn’t dried dried up.’

B: *pero a-ich u-taanke je7r-o7 mana7*  
 but(Sp.) DET-LOC 3SG.A-cistern OST-TD.DIST NEG.EXIST  
 ‘But in the cistern, there isn’t any.’

A: *a-te7r-o7 mana7 komplemente seeko*  
 DET-SP.SC-TD.DIST NEG.EXIST totally(Sp.) dry(Sp.)

*a-b’aje7 mana7*  
 DET-now NEG.EXIST  
 ‘But here (where you live) there’s nothing. Totally dry, now there’s nothing.’

[HB041023\_1EChK\_7]

Example (4.51) also displays a contrast between the partitive form, *te7ro7*, and the regional *tahr* (*tahj*), which denotes an unspecified area outside of the proximate

surroundings that relate to the speaker. Only after the discussion has introduced a specific place where the water is missing is the partitive form, *te7ro7*, used.

Sometimes the TDs *-a7* and *-o7* are omitted, leaving the semantic parameter of immediacy unspecified. It appears, however, that a place that *could* be specified as an immediate location is never referred to by the ID *te7r-* alone, but that any instances of the bare ID form are ones that would be marked with the *-o7* if a TD had been present. The example in (4.52) demonstrates this since the town of Ocosingo would never be referred to as immediate to a speaker living in Lacanjá. It represents a typical instance of how the bare ID *te7(r)-* may occur in texts (-X indicates the absence of a TD).

(4.52) *ma7 aw-ir-ej-Ø ta-yaan ich okosiingo*  
 NEG1 2SG.A-see-DEP-3SG.B SP.R.DIST-EXIST LOC TN

*t-u-xihmb'ar-o7b' u-taar te7 xahn-X*  
 COM-3SG.A-walk-3PL.B 3SG.A-come SP.SC also-X

'He was in (there) in Ocosingo. They walked and came there also.'

[HB050211\_1KYYM\_1]

The example in (4.52) is part of a story where KYYM's brother left their home in San Cristóbal de las Casas, where he and his brother had been raised, to go live in Lacanjá. The story then takes us through inter-mediate (remote) places like Ocosingo, where no Lakandonos live, and ends with his brother arriving in Lacanjá, not far from where KYYM is telling the story:

(4.53) *b'axik u-7istoria7 in-suku7n kaj taar-Ø*  
 how 3SG.A-story 1SG.A-oBr when come-3SG.B

*te7 xahn uhch-a7*  
 SP.SC also before.EXCL-TD.PROX

'That's the story (about) when my brother came here too.'

[HB050211\_1KYYM\_1]

*te7(r)a7* in (4.53) refers to the place where the speaker is located at the moment of speech. It is contrasted, not with some unspecified region, but with other locations that have been mentioned throughout the story such as Ocosingo, and possibly with other non-immediate regions of Lacanjá where KYYM and his family have never resided.

The regional forms, *wa(h)y(-e)* and *tahr(-o7)* are cognate to the ego-centric forms *way-e7* and *tol-o7* in Yukatek. They contain semantic features that relate regions to the

speaker in way that is very similar to what Hanks reports for Yukatek. Again, the corpus used to investigate the forms imposes some limitations on their analysis, but it appears that unspecified regions that are exclusive of the speaker's region are referred to by using *tahr(-o7)*:

(4.54)a *te7 ka xehn kij tahr-o7 kij*  
 SP.SC SUB go.IMP QUOT SP.R.DIST-TD.DIST QUOT

*xehn tahr-o7*  
 go.IMP SP.R.DIST-TD.DIST  
 'Here, you go!, he said. Over there, he said. Go over there!'

b *a-ray u-b'eer-ir aw-atooch-o7*  
 DET-ND 3SG.A-road-NOM 2SG.A-house-TD.DIST  
 'That's the way to your home'

[HB050211\_2\_2KYYM]

(4.54) is extracted from a long story about a man called "Baaker" who ventures into the underground as a consequence of being a zealous hunter of moles (see also section 5.5.2.3). Baaker spends most of the story trying to get back home to his family and he is repeatedly pointed in some direction that only ends up taking him to yet another location that is nowhere near his home.

The example is an utterance made by one of the beings that Baaker encounters, telling him to take a certain route that will lead him home. The character points to a trail (*te7*) and then points to the region that lies at the end of it (*tahr-o7*), an unspecified location that is exclusive of the place where the being himself lives.

The form that contrasts with *tahr(-o7)* is *wa(h)y*, which is exemplified in (4.55). The region referred to is an area where the speaker resides. It is not automatically contrasted to any other region or place, which I think is one of the motivations for the use of the form. A partitive division of space is more saliently dividable than referring to an area that naturally belongs to the speaker.

(4.55)a *b'äytak u-taar in-suku7n te7 uhch-a7*  
 close 3SG.A-come 1SG.A-oBr SP.SC before.EXCL-TD.PROX  
 'My brother came close to here.'

b *y-a7r-aj-Ø in-suku7n pues a-teech-o7 kij*  
 3SG.A-say-CP-3SG.B 1SG.A-oBr well(Sp.) DET-2SG.IND-TD.DIST QUOT

*suku7n p'aat-en*

oBr stay-IMP

'My brother said: you, my brother said, stay!'

- c *7a-teen-o7 b'in in-ka7*  
DET-1SG.IND-TD.DIST go 1SG.A-do  
'Me, I am going'

- d *wahy wich u-taar*  
SP.R.PROX in.front 3SG.A-come  
'He came here in front (of where I live)'

[HB050211\_1KYYM\_1]

Spatial reference by means of *wa(h)y* specifically refers to the place where the speaker lives, which is represented by his house and his corn field(s). This semantic feature is clearly visible in example (4.56) where the use of *wa(h)y* contrasts with the phrase *ujeer koor*, literally meaning 'another corn field' but conveying a meaning of 'another place to live':

- (4.56)a *a-ma7 t-a-k'uy-aj-Ø a-b'äj chan.k'iin*  
DET-NEG1 COM-2SG.A-take.off-CP-3SG.B 2SG.A-REFL PN  
'If you don't get yourself out of here Chan K'in'

- b *b'in a-ka7 kihm-in y-a7r-aj-Ø*  
FUT2 2SG.A-do die-PLN.IV 3SG.A-say-CP-3SG.B  
'you are going to die, he said'

- c *k-in-taar way-e7*  
INC-1SG.A-come SP.R-PROX-TD.ANA  
'I was coming here (where I live)'

[...]

- d *y-a7r-aj-Ø yaan ik-k'uy-ik-Ø ik-b'äj*  
3SG.A-say-CP-3SG.B OBL 1PL.A-take.off-PLN-3SG.B 1PL.A-REFL  
'He said, we have to get ourselves out of here'

- e *u-jeer koor*  
3SG.A-other corn.field  
'to another place (corn field).'

[HB040909\_1EChk\_1]

The regional deictic reference marker *wahy* has given rise to a noun that denotes the living area of the speaker. When possessed, the high tone that can be present in *wahy* is

replaced by a low tone. Phonological changes of this kind are fairly common and can be seen in the possession of nouns such as *när* ('maize') → *in-naar* ('my maize'), and *winik* ('person') → *u-wihnkir-ir k'ahx* ('the lord of the jungle'; see also section 2.4.2.2).

The fact that *waay* can be possessed, means that it has changed class membership to express a more concrete concept in the form of a noun.

- (4.57)a *yeet in-k'aan ti7 in-kän-ik-Ø ich mejiko*  
 with 1SG.A-hammockPREP 1SG.A-sell-PLN-3SG.B LOC TN  
 '...with my hammock to sell (it) in Mexico City.'

- b *entonces su7 k-inw-ir-ik-Ø t-u-b'o7t-aj-Ø*  
 so.then(Sp.) soon INC-1SG.A-see-PLN-3SG.B COM-3SG.A-pay-CP-3SG.B  
*in-waay*  
 1SG.A-place  
 'So I soon learned that he had paid for my hotel (my living quarters)'

[HB040909\_1EChK\_2]

Reference can also be made to a place that is not contrasted with another but which refers back to an already introduced location. This is done by using *ti7*:

- (4.58) *a-ti7 uhch-o7 taj ween ich chumuk b'ej*  
 DET-SP.ANA before.EXCL-TD.DIST LOC.R.DIST sleep LOC middle road

*ich okosiingo*  
 LOC TN

'There, he just slept in the middle of the road in Ocosingo'

[HB050211\_1KYYM\_1]

A common combination of spatial reference markers can be found in the use of the anaphoric/ non-specific reference marker *ti7* with the regional *tahr* to signal reference to an exclusive region that has already been referred to:

- (4.59) *a-ti7=tahr-o7 t-uy-a7r-aj-Ø kaj taar jertruhdes*  
 DET-SP.ANA=SP.R.DIST COM-3SG.A-say-CP-3SG.B when come PN  
 'There they said, when Gertrude came.'

[HB050211\_1KYYM\_1]

A few observations have been made outside of the interviewing sessions that support the semantic analysis of *wahy* and *tahr* regarding their use to contrast regions that are in an inclusive-exclusive opposition.

One day when I was sitting at the dinner table, immediately prior to catching a mini-van to go to San Cristóbal de las Casas, ChN said to me in Lakandon Maya that it was going to be cold in San Cristóbal. This is a frequently voiced opinion by all Lakandones, who live in the tropical lowlands of Chiapas. Following this statement she said: *waye7 chäkäw*, meaning 'here (where we live) it is hot'. The use of *waye7* can only be understood as the pointing out of a regional contrast between the area of Lacanjá and the remote and, to some degree, foreign town of San Cristóbal.

An instance involving *tahr* was observed when EChK and I were going in one of the aforementioned mini-vans on our way to Palenque. We had stopped to pick up some passengers about an hour from Lacanjá when EChK commented on a large puddle of water by the roadside, perhaps five meters away from us. I looked at it and asked him if he thought there might be any fish in there. He answered: *ti7 tahr mana7*, meaning 'There aren't any over there'.

This is an instance where the exclusive notion seems applicable since the place that was referred to was measurably close by, but outside of the speaker's access both in terms of habitat and familiarity. It was close to a Tzeltal town and EChK had in all likelihood never spent much time in that area.

#### 4.4.3 Summary of deictics in Lakandon- and Yukatek Maya

As we have seen in the presentation of the forms for deictic reference in the dimensions of *perception/attention*, i.e. by means of ostensive deictics, and *space*, using spatial deictics, the system appears largely preserved in Lakandon in comparison to what Hanks reports for Yukatek.

Both the forms and their grammatical properties are almost identical between Yukatek and Lakandon with a few notable exceptions: i.e. *järaj* ('here you are') and *tahr(-o7)* ('over there'). Perhaps more interestingly, there are some indications that the semantic contrasts and features present in the forms have been preserved also, although this is less certain given the comparatively small amount of time and attention devoted to observing their use.

The account above is included in the present investigation to introduce the system for deictic reference as a necessary prerequisite in order to be able to discuss the function and use of time deictics to which we now turn.

## 5. Semantic features of time words in Lakandon Maya

This chapter investigates and discusses the semantic properties of a number of time words that I have observed in analysed recordings of natural Lakandon speech. By semantic properties, I mean both the encoded semantics of an expression and the motivations and pragmatic considerations that are connected to the use of a certain word, i.e. the conveyed meaning.

My goal is to arrive at a coherent picture of time reference by observing the systematic use of time words and expressions with a focus on how temporally situated information relates to the speech participants and to the speech situation. It has been clear to me from early on in my work on Lakandon Maya, that there are aspects of the use of certain time words that cannot be accounted for in terms of temporality alone, as defined by Klein (1994) and others (see chapter 3).

The investigation and its chosen research perspective, which explicitly builds on Hanks' investigation of Yukatek deixis, is first and foremost an exploration of time deixis. It is more concerned with the use and meaning of words that are commonly defined as adverbs (but which are called particles in this investigation for reasons that are discussed in chapter 4), than an investigation of the system for tense-aspect-mood marking on the verb, which has already been thoroughly accounted for by Bohnemeyer (1998) for Yukatek.

The present chapter is organised in the following way: in 5.1, a definition of deixis, following Hanks (1990) discusses the relevant conceptual levels of meaning. The following sections, 5.2 through 5.5, contain analyses and discussions of the specific time words that are relevant to the investigation. This presentation is structured according to the established levels of meaning that are defined in 5.1, beginning with the relational value at the highest level, followed by the indexical ground and finally the communicative function.

In 5.6, the role of metaphor in Lakandon time reference is discussed in order to connect the results of the investigation with the discussion in chapter 3 regarding the semantics of time in language.

### **5.1 Deixis in Yukatek and temporal deictics in Lakandon**

Drawing on some of the same reasons that Hanks (1990) presents as a motivation for abandoning an objective view of space and spatial deixis in favour of a socio-culturally

conditioned view, the present investigation argues that temporal reference in language can only be understood from a detailed account of the context in which it occurs. Here, temporal reference is viewed as *a practice that orients the speech participants in relation to memories and expectations of events and states*.

The conceptualisation of time as a static one-dimensional line, on which all events and periods are placed and measured, corresponds directly to the proximal-distal division of deictic space based on distance parameters alone. A one-dimensional description of a deictic time word such as *now* results in a definition like, “the pragmatically defined time period containing the moment of utterance” (Levinson 1983: 74, see also section 3.2.2). There is more to the definition of deictic time reference than contrasting *now* with *then*, as *here* would be separated from *there*, by mere distance measurement with regard to the speaker.

As we have seen in chapter 3, the most compelling reason for comparing spatial and temporal deictics comes from the theory of localism; i.e. that the semantic properties of space are naturally transferred to time by means of metaphor. However, the space-time connection in temporal deictics can also be viewed reflexively, as a basic property of the linguistic category of deixis, and the obvious need to make reference to objects and events relative to oneself and others. Time deixis constitutes one deictic dimension and we will see how an understanding of the system of deixis allows us to gain a deeper insight into the semantics of time reference.

The A-series time model states that the experience of the “future-present-past”, which pertains to the perceived flow of time and our experience of present-ness, is a process of *updating beliefs*. From that perspective, both the future and the past are subject to a kaleidoscopic view that allows up- and back-dating by an experiencer. Language has a vast array of tools to signal the relationship between the speaker and some event, perhaps most saliently in the *qualificational* (Lyons 1977) categories of *tense*, *mood*, and *evidentiality*. The interaction between these categories is something expected and widely attested in the world’s languages so it should come as no surprise that the results of the present investigation has something to say about all of them.

A full description and understanding of deictic time reference must, in addition to the temporal perspective, explore features such as *modality* (what position the speaker assumes with regard to the information provided, section 3.3), *symmetries in access to information* (section 3.4), and *communicative functions* that the use of time deictics reveal.



A salient, but overlooked, feature of making reference to an event, other than its relation to some other past, present or future event, is how the experience of it is related to the speech participants and their individual beliefs. Placing an event in time is not only a matter of ordering or distance, but also relates to degree of assurance that something happened, taking into account what the addressee might know about the same event. The wider, inter-subjective perspective that the speaker assumes in making reference to an event or state is visible in language, semantically and structurally, and it is a salient feature of its description, along with its purely temporal interpretation.

In Lakandon Maya, this inter-subjective point of view has been lexicalised and constitutes an encoded feature of a group of time words that, although they should be considered as proper time words given their origin and function, most prominently define the knowledge asymmetries between the speech participants.

The traditional account of linguistic time is not at odds with the goals of this investigation. It is a matter of research perspective. If one uses the "time-line" as the *a priori* starting point in an investigation of linguistic time, then any results that come out of such an investigation will be limited to reflecting the semantic properties that the time-line allows. The before-and-after relationship between events that are said to constitute and *exhaust* the concept of linguistic time is a feature of the time-line itself, not necessarily of time as it is experienced by people and expressed in language.

The questions that I wish to answer are not focused on temporal distance or event order, although both concepts are referred to in parallel throughout the investigation, but rather what it means to refer to a past, present, or future event. What is it that makes *now* different from other times and what separates *now* from *before* or *later*? How are the diverse time words that are attested for Lakandon Maya used in making reference to some event? For example, what are the salient parameters that will provide a real understanding of what the concept 'before' means for a speaker of Lakandon Maya?

Another question is whether the semantic parameters that are relevant to the description of space, as defined by Hanks (1990) for Yukatek, are present in the temporal forms of Lakandon. If they are, then a socio-centric perspective is also relevant for temporal reference, a fact that, given the culturally dependent division of space, would be unsurprising and rather expected. The frequent observation that the Lakandones have very vague temporal notions when it comes to naming a time when something happened (cf. Baer & Merrifield 1971; Bruce 1968) is perhaps a consequence of underestimating other semantic parameters of time words.

### 5.1.1 The structure of deixis

If one wishes to step away from an over-simplistic description of time deixis, then it is necessary to define the category of deixis in as much detail as possible. Although the description following in this section may seem confusing at first, introducing several concepts and notions that are perhaps not stock-vocabulary in linguistics, it will become clear that such a description will aid the subsequent analysis of the time words that are of central interest. William Hanks' investigation of deixis in Yukatek proposes a framework that I have made use of in my own investigation of time deixis in the closely related language Lakandon. Hanks' anthropological perspective is however not reflected to a corresponding degree in my own work, which instead is oriented more towards a linguistic research perspective.

#### 5.1.1.1 Real world categories

The *real world*, which corresponds to the non-linguistic representation of reality that most of us agree on, can be divided into (deictic) *fields* where activities and contexts function as a background against which deictic acts of reference are performed. *Agricultural activity* is an example of a field relevant to this investigation since it is central – at least traditionally – to the cultural and social organisation of Lakandon society.

A field is divided into several *domains*, which are defined as “elements of actional wholes in which deictic reference is performed” (Hanks 1990: 67). Examples of domains are *space*, *time*, *person*, and *perception*. They all relate to some aspect of reference as a specific part of the greater field.

Deictic reference in the domain of space, within the field of agriculture may concern the layout of the cornfield, how plants are distributed, and how fields are bordered off from adjacent ones, but also how a certain field is located with regard to the household. The domain of time would make reference to the appropriate time to plant, the present state of the plants, what subsequent strategies will ensure a good harvest, and when the rains will come to end the dry season.

*Modes of access* provide a structure to the domains. They constitute aspects of the separate domains that are relevant to their definition. Modes of access for the spatial domain are, according to Hanks, *inclusion*, *exclusion*, and *relative immediacy*. Inclusion and exclusion, for example, involves *socially negotiated boundaries* and an *ego-centric*

*perspective* that is reflected in the linguistic forms: *way e7* ('here', inclusive of speaker) and *tol o7* ('there', exclusive of speaker).

Relative immediacy points out the definite location of something in relation to the speaker and the addressee and thereby constitutes a *socio-centric perspective*. This perspective is seen in the forms *te7el a7* ('here', immediate to speaker) and *te7el o7* ('there', non-immediate to speaker).

#### 5.1.1.2 Linguistic categories

The linguistic category corresponding to the deictic *field* of activity, is *genre*. Explanatory narratives, personal narratives, and traditional story telling are examples of genres where deictics are used in ways that depend on their function in that pre-established context.

*Dimension* is the linguistic category corresponding to the real world *domain*. The two concepts overlap in many ways. Hanks lists seven dimensions: 1) *spatial*, 2) *temporal*, 3) *participant*, 4) *perception*, 5) *discourse*, 6) *attention focus* and 7) *background knowledge*.

The dimension labelled *perception* contains features such as *tactual*, or *visual access*, both of which are salient semantic parameters of the ostensive-evidential demonstrative forms (OSTEVs, cf. Hanks 1990). The two most important dimensions pertaining to these deictic forms, i.e. *je7-*, are *attention focus* and *perception*. In the ostensive forms, space is not a factor. Rather, the perceptual accessibility of an object and the attention of the speaker and the addressee are emphasised.

*Features* give structure to the *dimensions* in the same way that the *modes of access* structure the domains of the socially constructed, real world. For the spatial dimension, the feature distinctions *inclusive* vs. *exclusive*, and *ego-* vs. *sociocentric* have already been exemplified above for the modes of access. Other features are *proximal* vs. *distal*, which are features that also are present in the already mentioned forms.

### 5.1.2 Relating the properties of Yukatek deixis to the temporal deictics of Lakandon Maya

There are important similarities between the deictic forms of Yukatek, as they have been investigated by Hanks, and the deictics that refer to time in Lakandon. A full account of the semantic features of the ostensive deictics in Yukatek is performed using

*three dimensions of meaning* (Hanks 1990: 262). It is important to separate this use of the term *dimension* from the concept introduced above which is the linguistic term corresponding to the “real world”, *domain* category.

During the course of my investigation it has become clear that a description of the temporal deictic forms in Lakandon benefits from a comparison to the ostensive forms found in both Lakandon and Yukatek. Although the complete schema will look different from the three-dimensional structure Hanks proposes for the ostensive forms of Yukatek, the dimensions Hanks proposes have a part to play in the description of the time deictics of Lakandon (see also section 6.1.1).

The first dimension of meaning is the *communicative function* of the linguistic form. For the ostensive forms of Yukatek, the parameters of this dimension are *presentative, directive, referential, and expressive*. They describe the speaker’s intention and the desired effect of an utterance on the addressee. This dimension of meaning is not only encoded in the deictic forms but is obtained by observing the functions that the forms serve in use.

The second dimension is the *indexical ground*. It defines part of the context where the referential act is performed. This dimension describes the *ground* by stating the relationship between the speech participants and the asymmetries in access that those participants have to the object (figure) in question. However, the indexical ground says nothing about the direct access that the speech participants may, or may not, have to the object but only how they stand *in relation to each other* with respect to some object.

The third dimension relates to the access that the speaker and the addressee (ground) have to the object (figure). In the ostensive deictics of Yukatek, this access is defined in terms of *evidentiality*. The speaker may have *tactual, visual, or sensory access* to an object, and he is able to communicate this access by using different terminal deictic forms (-a7, -o7, -b’e).

The reason for applying these three dimensions of meaning to define the semantic content and function of Yukatekan deictics is because the features that are connected to them exist on three different levels. They stand in predictable relations to each other and should be kept separate to facilitate a clearer description of the semantic make-up of Yukatekan deictics (see section 6.1).

Related to this, Hanks argues for two important tendencies of Yukatekan deictics and possibly of deixis in general. First, there is a “tendency towards proportionality across categories”, and second there is a “tendency for the proximal zone to be more

delicately differentiated than the remote zone” (ibid: 487). Both tendencies are relevant to the discussion of temporal deictics in Lakandon.

From the first tendency we can expect that the semantic distinctions and features that are found in one dimension of deixis (e.g. *perception*), are echoed in the forms of another dimension, such as *time*. The semantic transfer and correspondence between space and time is well attested, but from Hanks’ observations we should expect a connection between the deictic dimensions that can be explained simply by being an inherent property of the system of deixis in the language. An explanation of the semantic similarities of the deictic forms does not need a theory of localism to account for their inter-connectedness. The proportionality is instead viewed from inside the category of deixis as a fundamental category of language.

The second tendency will also be considered in the present investigation, although there is little reason to doubt its validity. There is a commonsensical conceptual connection between a distant place and a distant time that is reflected in the use of similar or identical deictic forms (e.g. Malotki 1983, for Hopi; Austin 1998, for Australian Aboriginal languages; Diessel 1999, for a typological overview) in making reference to them. ‘Far away’ and ‘long ago’ both contain an element of uncertainty and non-specificity that may motivate a metaphorical or metonymical use of a particular form. With more proximate reference the level of specificity increases and a more fine-grained distinction is made possible by the increased accessibility that a speaker has to a location or event. We naturally occupy the here-now with our body and our awareness while more distant memories and places are left obscure and remain at the fringes of our attention.

#### 5.1.2.1 Communicative functions of time deictics in Lakandon

The communicative functions of the time deictics of Lakandon are, as the “first tendency” of deixis (in Yukatek) predicts, similar to another class of deictic forms, namely the ostensive deictics. Even though the temporal deictics of Lakandon refer to eventualities and not visible objects or persons like the ostensive forms of Yukatek do, there is a large degree of overlap in the functions that they serve.

The first communicative function consists in presenting something as *personal knowledge* (see sections 5.2.1.1 and 5.3.1.1). It conveys a person’s beliefs, i.e. his knowledge and memory of an event or state with an attached degree of assumed personal responsibility for that memory. It may, or may not, assume a similar degree of

familiarity on behalf of the addressee. Personal knowledge has an *expressive* function in that it conveys the speaker's evaluation of a situation without any additional information on how the information was acquired.

Related to the communication of personal knowledge is the *direction of attention* (see sections 5.2.1.2 and 5.5.1.1). In using certain temporal deictics, the speaker wishes to direct the attention of the addressee towards certain information. The directive function is distinct, but closely related to referring to something as personal knowledge.

A third function is *referential* (see sections 5.2.1.3, 5.3.1.2, 5.3.2.1), where the speaker refers to something within his own set of beliefs, which is accessible to him by memory or direct experience. However, the referential function is not immediately connected to the personal knowledge of the speaker and allows for a wider range of access to the discourse object from the perspective of both the speaker and the addressee.

The fourth communicative function that appears specific to the dimension of time is *remind* (see section 5.3.2.2). In referring to some non-present eventuality that the speaker assumes the addressee to be familiar with, he may wish to remind the addressee of that eventuality, be it something the addressee was told or something both speech participants experienced.

#### 5.1.2.2 The indexical ground of time deictics in Lakandon

Compared to the previous dimension, the indexical ground shows an even greater similarity to the ostensive deictics of Yukatek. There are three features of the indexical ground-dimension in Lakandon time deictics. This dimension defines part of what has been called the speaker's *footing* (Goffman 1981), i.e. how the speaker positions himself in the act of reference with regard to the object but also to the context of the speech act.

The first mode of access is *symmetry of knowledge* (see sections 5.2.3 and 5.3.2) between the speaker and addressee. This mode, or feature, indicates that the speaker assumes a degree of familiarity, with regard to certain information, by the addressee. It may be a shared memory or equal involvement in a present activity. Temporally grounded statements in Lakandon are usually marked for symmetry relations and it is a fundamental feature of Yukatekan deictics in a more general sense.

The marking of inter-subjective knowledge does not depend on whether the addressee has seen or experienced an eventuality. It is neither modal, nor evidential in nature, and only refers to the participant's assumed perspective (see section 3.4).

The second, which follows from the first, is *asymmetry of knowledge* (see sections 5.2.1 and 5.3.1). This feature then, obviously indicates an unequal familiarity with an event or state between the speech participants. The speaker assumes that the addressee knows nothing, or very little, about information that he presents as personal knowledge and belief.

Thirdly, there is *transposed information*, which is the use of deictic forms in a context that does not directly involve the speech participants. It may be achieved by quotation or narrative strategies that remove the speaker and the addressee from being the ground in an act of reference.

A fourth symmetry relation is one where the speaker lacks any knowledge of an eventuality but assumes that the addressee has some knowledge of it (see section 3.4.4.1). This is a knowledge asymmetry that is present in the use of the interrogative particle *wa*, but since it is entirely free from any temporal content, it cannot form part of the description of temporal deictics in Lakandon Maya alongside with proper time words.

Instead, the fourth asymmetry is achieved by a reversal of the first asymmetry using an interrogative construction (that may include *wa*). There is no one marker that assumes the function of indicating an asymmetry towards the addressee, but it instead exists on a sentence-level (see section 5.2.1 and 5.3.1).

#### 5.1.2.3 Relational values of time deictics in Lakandon

The *relational values* of time deictics show the least amount of similarity with the ostensive forms. This is not surprising since the relational values are specific for each deictic dimension. Distinctions based on perceptual accessibility, like those found for the ostensive forms in Yukatek, are not salient to the time deictics of Lakandon.

However, as in the ostensive forms, the relational values of some time deictics serve the same purpose in describing the access that the speaker has to an object of reference, i.e. an eventuality of some kind. Others do not describe such access but specify purely temporal parameters. Relational concepts that we find in the time deictics of Lakandon are *experiential access*, *event-contrast*, *expectation*, *event-dependence*, and *sequence*.

The first feature is termed *directly accessible experience* (section 5.2). It can be translated as “the present” in that it refers to ongoing experience and information that is deemed accessible to immediate verification by the addressee. It is not clear where the boundaries are drawn with regard to the parameter of accessibility, but it must be assumed that the two most important parameters in this regard concerns present, ongoing activity and the diurnal span. The speaker’s point of view of these parameters and the context is what separates accessible from inaccessible experience.

The obvious contrast to the first feature is *directly inaccessible experience* (section 5.3), which corresponds to “the past”, since all eventualities that are marked by this feature, by definition are unavailable for verification by the addressee. They are only available in the form of the personal memory and the verbal assurance of the speaker.

*Contrastive to directly accessible experience* is the semantic feature (section 5.2.2) that not only presupposes inaccessibility to a certain state, but also marks that state as having changed in a way that is in direct opposition to what can be observed presently. The opposite of this feature, *contrastive to directly inaccessible experience* (section 5.3.1.3), presupposes the opposite, namely that what can be observed presently is in contrast to an earlier state that no longer holds.

However, the contrastive feature is not encoded in any specific form but rests on the morpho-syntactic operation of topicalisation, making it a “derived” feature in the present context. It will occupy a place in the present investigation but does not exist on the same level as some of the other features.

The relational value *non-immediately accessible to experience* (section 5.4) describes reference to future events. It is conceptually divided into two the sub-values, *expectation* and *intention*. The former belongs to the event-dependent forms (section 5.4.1) and the latter to the speaker-dependent ones (section 5.4.2). Given the larger picture of the semantics of time words, it is motivated to include intention in the description even though it appears more modal than temporal from a categorical perspective. But this is a distinction that has troubled the description of tenses in European languages as well. It is by no means specific to Lakandon (cf. Enç 1996).

There are several time words in Lakandon that express one of several *dependency* relationships between two events that can be described in terms of *consequence* and *sequence*. A relational value connected to the former of these concepts is *resultative* (section 5.5.1). A form with this semantic feature is referred to as being dependent on a



previous event or a future expectation. This makes the form non-deictic conceptually, but we shall see that the line between clearly deictic expressions and ones with a resultative feature is less clear than one might expect.

The latter feature, sequence, relates to event-dependency. Forms and expressions with *sequential* (section 5.5.2) as a relational value serve to situate an event with regard to other temporally related events that together form a chain-of-events. There are two ways to describe the relationship between events that are connected through a chain-of-events, i.e. by *temporal distance* and *completion*. A combination of sequence with one of the two latter features results in the relational features, *immediate sequential*, *non-immediate sequential*, and *sequence separated by termination* (section 5.5.2).

What emerges from the interaction between the relational features and the indexical ground, are two distinct perspectives available for making temporal reference. Events can be referred to from a *speaker-perspective*, or viewed from an *event-perspective*. These conceptual labels resemble two well-established concepts used in the semantic analysis of time in language, namely *absolute* and *relative* time, but the former are different from the latter concepts. The difference is wholly due to research perspective, i.e. a pragmatic- vs. a truth-conditional semantic description. The pragmatically anchored investigation of time words in Lakandon Maya motivate the two new labels, which are discussed in the following section.

#### 5.1.2.4 Speaker- vs. Event-perspective

To form a coherent view of time reference using the three dimensions of meaning introduced above, we have to consider the interplay between the indexical ground and the relational values, being two of these dimensions. The semantic definition of time reference in Lakandon Maya largely depends on whether that reference is grounded in a *speaker-perspective* or an *event-perspective*. This division is supported by the analysis of a number of time words that are investigated in the present chapter, below.

*Speaker-perspective* (section 5.2; 5.3; 5.4) means that an instance of time reference primarily relates to *the speaker's knowledge* and *intention*, inclusive or exclusive of the addressee's knowledge and beliefs, as they are indicated in the indexical ground dimension. An eventuality is thus referred to as independent from another eventuality, purely from a deictic perspective. If it is, then it is grounded in a speaker-perspective, where the frame of reference is the memory and the expectations

of the speaker. As it happens, in Lakandon, the perspective of the speaker includes the knowledge or expectations of the addressee with regard to the same eventuality.

Examples of expressions that will exemplify this type of perspective are the deictic expressions: *7uhch* ('before'), *ka7ch(ik)/kuhch* ('before'), *b'aje7* ('now', 'today'), *je7...(ik)e7* ('surely', modal "future" marker), and *tok* ('already', 'just').

Some eventualities have a "stand-alone" quality that does not require them to be referentially connected to other events or states. If a speaker of Lakandon tells me that he used to be afraid of ghosts when he was a child, he will probably state this fact as something relating to his personal knowledge/experience by marking it with *7uhch* or *ka7ch(ik)/kuhch* depending on whether he has told me this before, or not.

Contrasting one eventuality with another is not the same as marking it as being *dependent* on some other eventuality in making reference to it. Contrast can be expressed by topicalising an expression (e.g. *7a-uhch-o7*) whereas referring to an expression by connecting it to some other event is achieved by using specific markers (e.g. *-we7*). In the example from above where a speaker expressed his fear of ghosts, he may also contrast this information with the present situation, where he is not afraid of ghosts, by topicalising either *7uhch* or *ka7ch(ik)/kuhch*.

A speaker-perspective does not mean that an event cannot be *contrasted* to another non-specified eventuality. At least in Lakandon, contrasting an event with another in making reference to it does not make it event-grounded.

*Event-perspective* (section 5.4; 5.5), on the other hand, reflects a grounding of an event in some other *event* or *chain of events* in making reference to information using certain time words in Lakandon, like: *-we7*, *(7a)b'ahywo7*, *sahmin*, *sahnsam*, *b'ihn*, *b'in* *ERG-ka7*, *tz'o7kir*, *pahchir*.

An event perspective primarily relates the figure (i.e. the event referred to) to other events that stand in some explicit relation to it. This semantic "dependence" is not one between the past and the present, but rather takes into account the specifics of the situation, and the nature of the event. It contains information about the relationship between events as the primary semantic parameter but at the same time provides information about the larger chain-of-events.

Reference to an event that is event-dependent does not exclude a deictic meaning. The ground may still be the moment of utterance although the motivation for using a certain particle depends on whether it can be connected to some previous or subsequent event. Such an act of reference cannot be confined to the speaker's perspective but does

not automatically become non-deictic, although non-deictic uses are available for all event-dependent forms.

As stated above, the familiar separation between absolute and relative time reference is reflected in the labels *speaker-perspective* and *event-perspective* but should not be confused with them. The latter terminology has pragmatic motivations and takes into account the specifics of the speech situation. They are necessary to make clear the pragmatically motivated semantics of time words in Lakandon, whereas the former belong to the truth-conditional description of tense and event-order.

## **5.2 PRESENT: directly accessible experience**

As Hanks observes, the present, being conceptually equivalent to 'here', is amenable to a fine-grained division that is largely unavailable for the past. This somewhat obvious fact stems from one of the tendencies of deixis that were discussed above in section 5.1.2, i.e. the "tendency for the proximal zone to be more delicately differentiated than the remote zone" (Hanks 1990: 487).

Directly accessible events are referred to in ways that stand in different relation to the speaker and the addressee. This division follows the separation into speaker- and event-perspective that was introduced above. In this section, we will only discuss forms that originate in a speaker-perspective. Event-perspective reference to directly accessible experience will be treated in section 5.5.

### **5.2.1 PRESENT: asymmetrical knowledge**

The use of *b'aje7*, which is the most obvious candidate for a word equivalent to the English 'now', is motivated primarily by an *asymmetry of knowledge between the speaker and the addressee* (see 5.1.2.2, above). This indexical feature is present alongside the relational value of directly accessible experience that corresponds to the exclusively temporal notion of "moment of utterance". By using *b'aje7*, the speaker refers to something that probably is news to the addressee, and that is the personal knowledge of the speaker (without specifying how the knowledge was obtained).

Access to direct experience means that the information is presently available (see *the relational values*, above), and even though an event or state might not be "happening" at the moment of speech, it may still be regarded as something that is accessible to verification, or part of an ongoing activity. Certainly, occurrence within the diurnal span plays a role as well in the choice to use *b'aje7*.

*b'aje7* is available for several communicative functions; it can *present personal knowledge*, or *direct the focus of attention* of the addressee with regard to some discourse object. The direction of the addressee's attention is of course closely connected to the asymmetry of access to knowledge that the speaker assumes for himself and the addressee.

The remaining communicative function, *referential*, shares the non-communicative semantic features present in *b'aje7*, but functions to distance the speaker from the discourse object.

*b'aje7* also has other relational values and can be used as a marker of *contrast to an earlier or later time*. This use of the form is a syntactically topicalised one, and is clearly separate from *b'aje7* as a marker of personal knowledge. However, as a marker of contrast, (a)*b'aje7* can serve any of the communicative functions discussed above, since marking a contrast is a relational value of the form and not a communicative function. In a more traditional sense, the relational meaning contained in this form is what defines the moment of speech as opposed to another point in time.

#### 5.2.1.1 Presenting personal knowledge

The first communicative function of *b'aje7*, namely to present personal knowledge, is exemplified in example (5.1), below. The example is taken from is a narrative that one of my main consultants, EChK, had been told by a Tzeltal speaker.

It is a formulaic story about being drunk and loosing your way in the jungle. It includes a meeting with a strange woman living in the jungle and describes their encounter. In the excerpt, the man who told EChK the story has just woken up from sleeping in a house that he was invited into by the woman he met on the previous night. The house had then contained all the important features that one can expect, like food, lighting, and a bed. Upon waking up, however, everything was different and the Tzeltal man was once again only surrounded by the jungle, without a bed and food. The woman was also gone.

- (5.1) a *k-u-p'er-ik-Ø*                      *u-wich*                      *y-a7r-aj-Ø*                      *y-ir-aj-Ø*  
 INC-3SG.A-open-PLN-3SG.B 3SG.A-eye 3SG.A-say-CP-3SG.B 3SG.A-see-CP-3SG.B

*ich k'ahx*

LOC forest

'When he woke up, he said, he could see the forest'

b *y-a7r-aj-Ø*                      *yaan*    *kib'*  
 3SG.A-say-CP-3SG.B    EXIST    light  
 'He said, there was light!'

c *teen*    *inw-a7r-ik-Ø-o7*                      ***b'aje7***    *yaan*    *kib'*  
 1SG.IND 1SG.A-say-CP-3SG.B-TD.DIST    now.EXCL    EXIST    light  
 'I am telling (you), there was light!'

d *y-a7r-aj-Ø*                      *läk*                      *yaan*    *y-atooch*  
 3SG.A-say-CP-3SG.B    all                      EXIST    3SG.A-house  
 'He said, there was a house (and all)'

[HB040929\_1EChK\_6]

*b'aje7* (in bold) serves to mark information as personal knowledge that, since the narrator was on his own when the events of the story took place, is new information to anyone else. There is no contrast to another time since there is no relevant event to contrast it with. *b'aje7* refers to the time of telling the story and belongs to the phrase; *teen inwa7riko7*. It has nothing to do with the time-line of the story itself. If it had, then the translation of the phrase would be the rather strange: 'I am telling you, there is light now!'.  
 Given that there is no way of verifying the events that took place on the previous night, the addressee is invited to believe the speaker as he recounts them. The utterance in (5.1c) is a repetition of (5.1b) without any temporal modification of it.

It is clear that what is at stake are the beliefs of the speech participants. The speaker wants to assure the addressee of the truthfulness of what he is saying. He does not contrast the moment when there was light (on the night before) with the time when all he could see was forest. If that was the case, another form, *7ab'aje7(re7)* ('now, as opposed to before') would have been used, a form that also is contrasted with *7auhcho7* ('previously, as opposed to now'). These two expressions will be explored in detail below (sections 5.2.2 and 5.3.1.3).

Why should *b'aje7* not be regarded simply as a marker of *new* information? There are at least three reasons for why such an analysis would be inadequate. First of all, *b'aje7* has a temporal function. It is only used with events that are directly accessible to experience, as discussed above. Second, *b'aje7* does not mark *all* new information in a given stretch of discourse. It only marks information that relates to the personal knowledge of the speaker.

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The third argument is an indirect one since it concerns the function of expressions that contrast with *b'aje7*, namely *tok* and *ka7chik/kuhch*. Both expressions would be candidates for markers of *old* information in a “present” and “past” context, respectively but since they can appear anywhere in a stretch of discourse, including at the beginning, this means that they refer back to information outside of the current speech situation. Old information markers are commonly used to mark already activated information within discourse, so if an event that is being referred to using one of the three markers above, has not been introduced in the relevant frame of discourse, then these markers are by definition not new-old information markers.

*b'aje7* can also appear in phrases *eliciting* personal information. It signals a request for personal knowledge in questions. This function of *b'aje7* follows from its semantic features, which primarily relate to the personal knowledge of the speaker. In an interrogative construction the asymmetry relation present in *b'aje7* becomes reversed since the speaker by formulating a question asks for the knowledge of the addressee regarding some event. In this situation, *b'aje7* marks information that the speaker assumes the *addressee* to possess (section 3.5).

An example of this reversal can be seen in (5.2), which is from a conversation between EChK (E) and his aunt L. Present is also another female relative to L and EChK, A. At the time of recording, EChK and L had not seen each other for some 20 years, and not long before EChK's and my own arrival, L's husband M had died of old age. What follows are two excerpts from the conversation which demonstrate the use of *b'aje7* in questions as a request for personal knowledge.

- (5.2) a E: *tu7 t-a-pur-aj-Ø* [tapuraj u-]  
           where COM-2SG.A-leave-CP-3SG.B

*u-b'aaker inw-äkän b'aje7*  
 3SG.A-body 1SG.A-FZH now.EXCL  
 'Where did you leave the body of my in-law?'

- b L: *t(i7)-u-kuhch-i7*  
       PREP-3SG.A-confined.place-TD.LOC  
       'In the cemetery'

- c E: *a-je7 päch-ir ja7*  
       DET-OST back-NOM water  
       'On the other side of the water?'

d L: *t(i7)-u-kuhch-i7*  
 PREP-3SG.A-confined.place-TD.LOC  
 'In the cemetery'

e E: *ati7=tahr*  
 DET-SP.ANA=SP.R.DIST  
 'Over there'

f L: *laj-i7*      *t(i7)-u-kuhch-i7*  
 ND-REF      PREP-3SG.A-confined.place-TD.LOC  
 'He's in the cemetery'

[HB050319\_1EChK\_1]

In (5.2), *b'aje7* does not contrast to another time, previous or later. When EChK asks L where the body of her late husband is there is no previous location to contrast it with. The body of a living person cannot be left anywhere. EChK simply wants to know from the person who buried him where he was buried. Traditionally, there is no obvious place for someone to be buried although L's husband, M, apparently was buried in a cemetery that was established by missionaries living in Najá.

In example (5.3) L's relative A asks EChK in a related subject matter if he believes in God. One might think that this is a question about the current state of EChK's beliefs in contrast to previous ones, but the missionaries had had very little impact on the inhabitants of Najá before EChK left. Thus, neither EChK, nor L were Christian when they last saw each other. At the time of the conversation, L is a devout Christian and wants to know if EChK has found the faith too. EChK answers, using *b'aje7*, to say that he has given it up. He adds that he used to be Christian before but only to inform L that he had been in the past, something that L could not know because of EChK's long absence from where she lives.

(5.3) a E: *wa b'a7ik b'in-e7x*  
 DUB like.that go-2.PL.INCL.B  
 'All of us must go like that'

b A: *teech t-aw-ak-s-aj-Ø*      *t-aw-oor*      *b'aje7*  
 2SG.IND COM-2SG.A-put-CAUS-CP3SG.B      PREP-2SG.A-mind now.EXCL  
 'Are you Christian now?'

[...]

c L: *je7      b'isik-eech      a-k'uj*  
 ASSUR ?-2SG.B DET-god  
 'God will watch over you'

d A: *teech      t-aw-ak-s-aj-Ø      t-aw-oor      b'aje7*  
 2SG.IND COM-2SG.A-put-CAUS-CP-3SG.B PREP-2SG.A-mind now.EXCL  
 'Are you Christian now?'

e E: *teen      mana7      t-in-p'ät-aj-Ø      b'aje7,*  
 1SG.IND NEG.EXIST COM-1SG.A-leave-CP-3SG.B now.EXCL  
 'I am not, I gave it up'

f L: *t-a-p'ät-aj-Ø*  
 COM-2SG.A-leave-CP-3SG.B  
 'you gave it up'

g E: *uhchik*  
 before.EXCL  
 'I used to be'

[HB050319\_1EChK\_1]

To briefly illustrate the difference between *b'aje7* as a marker of personal knowledge that is assumed to be new to the addressee and *b'aje7* as a contrast to a previous time, the example in (5.4) has a sentence that contains both.

The extract comes from another conversation, this time between EChK's son, KY and his cousin GKY. Coaxed by me, they were discussing trips into the jungle and how they guide tourists to the nearby waterfall or to the more distant lake. GKY informs KY that there is a lot of water in the lake:

(5.4) GKY: *pero      b'aje7      ne7      b'uhro7      a-b'aje7*  
 but(Sp.) now.EXCL very deep DET-now  
 'But it's very deep, right now'

KY: *hmm*  
 murmur  
 'uhuh'

[HB040915\_1GKY\_5]

In example (5.4) *b'aje7* marks GKY's knowledge about the state of the lake since KY has just told him that he has not been there in a while. The second instance is topicalized with the determiner *7a-* and marks a contrast between the present state and a



previous time when the water level was lower. This is however a separate form that contrasts a factual state that is immediately accessible to experience, to a previous inaccessible one. The first instance of *b'aje7* emphasises an asymmetry of knowledge between the speech participants whereas the second mainly marks a contrastive factual state of affairs.

Yet another example of the use of *b'aje7* to mark personal knowledge that is unknown to the addressee can be seen in a conversation between EChK, his son KY, and EChK's wife (also KY's mother), ChN. In (5.5), the three of them are discussing the conditions that I had proposed for working as language consultants with me on the documentation project. The proposal that I put forth was presented before KY came into the room. Since he had not heard the previous discussion, he asks his father EChK (in 5.5b) how much he is going to get for teaching me (Lakandon) Maya.

- (5.5) a E: *ka7 u-kaab' u-k'äb' 7oora k-u-kur-tahr*  
 two 3SG.A-short 3SG.A-hand hour INC-3SG.A-sit-ASSUM  
 'He is going to sit (and work) for eight hours'

- b KY: *uhuh teech*  
 alright 2SG.IND  
 'OK, and what about you?'

- c E: *b'aje7 juhm b'uj k'ab' winik u-b'o7r-ir jun-p'ehr k'iin*  
 now.EXCL one half hand person 3SG.A-pay-PLN.IV one-NCL.IAN day  
 'A hundred peso for one day'

- d E: *como kaxi ka7 teen a-koor kasi*  
 like almost when 1SG.IND DET-corn.field almost

*ka7 u-kaab' u-k'ab' 7oora k-a-ku(r)-tar*  
 two 3SG.A-short 3SG.A-hand hour INC-2SG.A-sit-ASSUM  
 'Almost like working in the milpa, you sit (and work) for eight hours.'

- e E: *ti7 yaan k'iin kaab'ar ni7 che7*  
 SP.INDEF EXIST sun under tip tree

*to7n (ij)k-a7(r)-ik-e7x*  
 1PL.DUAL.IND 1PL.A-say-PLN-2PL.B  
 '(Until) The sun is below the tip of the trees, is what we said'

f E: *b'aje7*     *y-a7r-ik-Ø*     *u-raak'*     *in-yuum*     *b'aje7*  
 now.EXCL 3SG.A-say-PLN-3SG.B 3SG.A-wife 1SG.A-BrS now.EXCL

*a-b'or-o7*     *y-a7r-ik-Ø*  
 DET-PN-TD.DIST 3SG.A-say-PLN-3SG.B

*ma7 koj*     *k-u-b'o7t-ik-Ø*  
 NEG1 expensive INC-3SG.A-pay-PLN-3SG.B

'My nephew's wife [Bor's wife] says, Bor says that he does not pay much'  
 [HB040904\_1EChK\_10]

Two important pieces of information are marked with *b'aje7*, namely how much the pay was going to be, and what the people that had been contacted by me previously thought about the amount in question. Both statements were of interest to KY and he had not heard either of them since they had been discussed prior to his arrival.

A final example of *b'aje7* in this communicative function comes from a story about a man who is killed in the forest but who comes back as a ghost to tell his wife what had happened and why he had been away for so long. In the following example, the ghost of the man speaks to his wife:

(5.6) a *t-in-p'ät-aj-Ø*     *kij*     *tah*     *nahch-i7*     *kij*  
 COM-1SG.A-leave-CP-3SG.B QUOT SP.R.DIST far.away-TD.LOC QUOT

*ich k'ahx*     *ich k'ahx*     *t-inw-u7k-uch*     *kij*  
 LOC forest LOC forest COM-1SG.A-return-? QUOT  
 'I left it, he said, far away in the forest, he said. I am coming back from the forest, he said.'

b *ma7 w-ir-ej-Ø*     *b'aje7r-e7*     *kij*     *ti7*     *yaan*  
 NEG1 2SG.A-see-DEP-3SG.B now.EXCL-ANA QUOT LOC.ANA EXIST

*ti7 yaan in-juur-o7*  
 SP.ANA EXIST 1SG.A-catch-TD.DIST  
 'You know, now, he said. It is there, my catch is there.'

c *pero b'in u-ka7*     *tu7-tahr*     *kij*     *a-b'ahyw-o7*     *kij*  
 but(Sp.) FUT2 3SG.A-do rot-ASSUM QUOT DET-now.RSLT QUOT

'But it will spoil, he said, because of this (me being a ghost), he said'  
 [HB050225\_1KYYM\_2]

The information that the man presents his wife with regarding the still existing catch is that it is available to be retrieved even though it is far into the forest. At the same time

*b'aje7re7* works to ensure the wife that her husband (in the form of a ghost) knows this for a fact.

One day when I was coming along with EChK to go see the ruins of Lacanjá, I observed a telling instance of how *b'aje7* is used to elicit personal information. As we passed the pond where his father grows fish, EChK called out to his father, who was standing by the side of the pond along with two other relatives; *yaan ruhtz' k'äy baji7?*. What this phrase conveys is a request for accessible information from the fisher (i.e. EChK's father) if he is getting any fish. *b'aje7* has *-i7* as a locative terminal deictic element thus overriding the *-e7* ending phonologically, yielding *-i7-e7* → *-i7*. The form does not indicate a request for the access to fish on that particular day as opposed to any other day, but only if he is getting any fish from the pond.

#### 5.2.1.2 Directing the attention focus of the addressee

Directing the addressee's focus of attention is a special case of presenting something as personal knowledge. This follows from Hanks' argument that all features pertaining to the communicative functions of the ostensive deictic forms are inclusive in the sense that more specific forms include the more general ones.

Therefore, the most specific function, presenting personal knowledge, includes all the functions to the left of it. The directive function does not necessarily present personal knowledge, but it is a form of referential, which includes the directive function. This inclusion within the set of communicative functions is displayed in the hierarchy below; from less (far left) to more specific (far right):

Referential > Directive > Personal knowledge

*b'aje7*, in this sense, can be translated as, 'as you can (still) see' or 'listen to/look at what I am doing/telling you', meaning that the speaker involves the addressee in some present activity. This form of *b'aje7* serves no temporally contrastive function with regard to a previous or later time. Information that is accompanied by this form is marked as immediately accessible to both speech participants but previously inaccessible (unknown) to the addressee.

Although the meaning of this form of "now" is without any temporal properties as defined against the time line, the expression serves to anchor the marked eventuality in

the present by directing the focus of attention of the addressee to an ongoing activity or event.

*b'aje7* in its directive function is common in *explanatory narratives* where the speaker is performing some task that he or she assumes is unfamiliar to the addressee. To direct the attention of the addressee towards some aspect of the activity, *b'aje7* is used. An example of this particular use of *b'aje7* can be seen in an explanatory narrative where the speaker, EChK's wife ChN, is tying a basket.

The narrative begins with some background comments directed to me as I record the event. ChN explains that she previously did not know how to begin tying a basket, but that she has since learned. After providing this background information, to the present state of knowledge regarding the making of baskets, ChN goes on to explain the actual procedure of tying the basket:

- (5.7) a *b'aje7*      *ma7 in-jo7k'-t-aj-Ø*  
           now.EXCL    NEG1 1SG.A-come.out-TR-CP-3SG.B  
           'I didn't take it out (all the way)'
- b *in-k'äs=jo7k'-t-ik-Ø*                      *chichin*  
           1SG.A-only=come.out-TR-PLN-3SG.B    little  
           'I only take it out a little'
- c *a-b'ik*      *in-jo7k'-t-ik-Ø*  
           DET-how 1SG.A-come.out-TR-PLN-3SG.B  
           '[Do you want to record] how I take it out?'
- d *k-in-jo7k'-t-ik-Ø*                      *sok ma7 u-so7k-tahr*  
           INC-1SG.A-come.out-TR-PLN-3SG.B    SUB    NEG1 3SG.A-twist-ASSUM  
           'I take it out so that it does not become twisted'
- e *b'a7ik in-jit'-ik-Ø*  
           like.that 1SG.A-tie-PLN-3SG.B  
           'That is how I tie (it)'
- f *in-jo7k'-t-ik-Ø*                      *chichin wa7 ne ya7b'*  
           1SG.A-come.out-TR-PLN-3SG.B    little      COND    very    much
- b'ikin ya7b' in-jo7k'-t-ik-Ø*  
           whenever much 1SG.A-come.out-TR-PLN-3SG.B  
           'I take it out a little. I may take it out a lot, sometimes I take it out a lot'

g *a-b'eje7*      *ma7 ya7b'*      *k-in-jo7k'-t-ik-Ø*      *chichin,*  
 DET-now.EXCL NEG1 much      INC-1SG.A-come.out-TR-PLN-3SG.B      little

*ma7 ya7b'*

NEG1 much

'Now, I'm not taking out very much of it, only a little, not much'

h *ya7b'*      *k-in-jäx-ik-Ø*      *ya7b'*      *in-jo7k'-t-ik-Ø*  
 much      INC-1SG.A-spin-PLN-3SG.B      much      1SG.A-come.out-TR-PLN-3SG.B

'If I spin a lot, I take out a lot'

[HB041025\_1ChN\_1]

The first instance of *b'aje7*, in (5.7a), is the first utterance that is related to the actual making of the basket the speaker is working on. It serves to direct the addressee's attention (i.e. mine) to how the rope is handled in order not to get tangled up in the process. The following comments, (5.7b-f), follow from this first piece of information with the exception of (5.7c) which is a side comment to something EChK asks me, namely if I want to record the actual procedure of making the basket.

In (5.7g), *ab'eje7*, has a different function. The meaning contains a contrast to another hypothetical instance of tying a basket, on another occasion (5.7h). During the present performance the rope is not taken out very much, but if the speaker wanted to tie a bigger basket, or several baskets, she would take out more rope.

When ChN is done tying the basket, and there is nothing more to film or record, she indicates this by using *b'aje7*. This is seen in (5.8) from the same recording.

(5.8) a *b'aje7*      *tz'o7k*      *in-tzikb'a-t-ik-Ø*      *a-b'aje7*  
 now.EXCL      TERM      1SG.A-tell-TR-PLN-3SG.B      DET-now

*wa7 ka7 e7tz'-ik-Ø*      *ti7*      *ch'ik-a7n*

Q      that      ?-PLN-3SG.B      PREP stand-PARTC1

'Now I am done telling (it). Is it taking pictures (the video camera on a tripod), standing there?'

b *jach*      *jo7k'-ir*      *ki7*      *jo7k'-ir*  
 straight      come.out-PLN.IV      good      come.out-PLN.IV

'It came out straight, it came out very well'

[HB041025\_1ChN\_1]

In (5.8a), the first instance of *b'aje7* alerts the addressee to the fact that there is nothing left to record and that the speaker is done tying the basket. The second form, *ab'aje7* is

the same contrastive form that we encountered in (5.7g), but in this context it contrasts with the previous activity that now is finished.

Another example of the use of *b'aje7* in this communicative function comes from a short explanation by EChK, directed at ChN, about how my small recording device works. EChK has just asked me several questions about what the little machine does. In addition, older machines have been discussed and their size contrasted to the smallness of the machine that I brought. As explained above, ChN is near mono-lingual in Lakandon Maya and therefore gets an explanation of what had been said from EChK, whenever we discuss anything in Spanish.

- (5.9) a *b'aje7*    *nä7*    *entonces*    *a-ti7*    *y-a7r-ik-Ø-e7*  
           now.EXCL    M    so(Sp.)    DET-SP.ANA    3SG.A-say-PLN-3SG.B-TD.ANA
- espanyol*    *te7*  
           Spanish(Sp.)    SP.SC  
           ‘Look here mother! So, it speaks in Spanish here’
- b *entonces*    *a-te7*    *t-u-kän-äj-Ø*    *u-b'a7ikin*    *wa*    *tu7*  
           so(Sp.)    DET-SP.SC    COM-3SG.A-learn-CP-3SG.B    3SG.A-how    DUB    where
- b'in-i7*    *tahn*    *u-wutz'-ik-Ø*    *u-när*  
           go-TD.LOC    DUR    3SG.A-double-PLN-3SG.B    3SG.A-maize  
           ‘So here it learned how one goes to fold the corn stems’
- c *tahn*    *u-tz'ikb'a-t-ik-Ø*    *u-t'aan*    *tz'u7r*    *te7*  
           DUR    3SG.A-tell-TR-PLN-3SG.B    3SG.A-word    foreigner    SP.SC  
           ‘It is writing the story in Spanish, here’
- d *raj-e7*    *te7*    *jach*    *t'aan*    *k-u-räk=tz'ikb'a-t-ik-Ø*  
           ND-TD.ANA    SP.SC    very    word    INC-3SG.A-all=tell-TR-PLN-3SG.B  
           ‘This one here, is writing all of it in Maya’
- [HB040904\_1EChK\_3]

The last example of the directive function of *b'aje7* comes from a traditional narrative about a scary person called “Läj K'iin” who abducts people in the jungle. This example is transposed by means of quotation and *b'aje7* as a director of attention is therefore not relevant to the speech situation where the recording took place.

“Läj K'iin” eats his captives, so the story is about how two cunning Lakandonos make their escape from Läj K'iin and his evil wife. In the extract from the story, Läj K'iin's wife is about to kill both Lakandonos who are held captive by the pair. One of

the Lakandonos has come up with a trick to get the evil wife to cut off her own head. The first step of the trick consists of showing her how to cut his throat most efficiently:

- (5.10) *b'aje7 nah k-a-k'up-ik-Ø in-k'o7ch kij*  
 now.EXCL ? INC-2SG.A-cut-PLN-3SG.B 1SG.A-throat QUOT  
 'You should cut my throat (like this), he said.'  
 [HB040917\_1EChK\_5]

Like in the three previous examples, *b'aje7* in (5.10) functions to direct the attention of the addressee to an activity that was not in the focus of his/her attention previously.

### 5.2.1.3 Referential

The referential function of *b'aje7(re7)* is most clearly seen in discourse segments where a speaker points out a certain event or time period that he has some personal knowledge of, which means that the same indexical ground and relational values that are found with the communicative functions described above, are present here too.

The first example comes from a recording where EChK and KY are sitting in EChK's kitchen trying to come up with as many dreaming-divinations as they can think of (cf. Bruce 1975, 1979). They are helping each other remember and I have asked them to tell me what different dreams mean, and what sort of dreams are relevant to interpretation. This is knowledge on the wane and EChK has trouble remembering what different images found in dreams correspond to in the waking hours. KY tries to assist him by remembering what he has heard from older relatives, not necessarily from EChK.

The use of *b'aje7* exemplified in example (5.11) below, constitutes an *ostensive reference to a temporal entity*, i.e. it points to a specific day even though what is discussed is only the *character* of that day, *b'eje7/b'aje7* is used instead of the ostensive *je7r..-TD* form, but points to events in an identical way:

- (5.11) E: *b'aje7, taar [u] k-u-taar b'uhru7*  
 now.EXCL come INC-3SG.A-come flood  
  
*b'i(h)n b'uhru7 wa kăx ja7*  
 FUT1 flood(ing) DUB little water  
 'This day, comes, it comes, rises, it is going to rise, a little, the river'  
 [...]

*ihk'*

wind

'The wind...'

KY: *b'aje7*     *u-k'iin*     *kaj*  
now.EXCL   3SG.A-day   village.dweller  
'This day (I know) is the day of foreigners'

E:     *u-k'iin*     *kaj*  
3SG.A-day   village.dweller  
'... (it is) the day of foreigners'

[HB040905\_2EChK\_7]

In a story by a female speaker, CChNK, about the first time she gave birth, *b'aje7* is used to refer to an event that is relevant to the main events of her story, but which also is in contrast to the same events. The recording was made by Una Canger (Canger 1970c), in San Cristóbal de las Casas as part of a project to make root-dictionaries for Mayan languages. Canger had not transcribed, nor translated the story when she gave the digitised recording to me. The processing was done by me with the help of CChNK's son, MChKY, 35 years later.

The contrast that *b'aje7* points out is between the first time the speaker gave birth and another (second) time when the experience of giving birth was less distressing and painful:

(5.12) *b'aje7*     *7a-je7*     *juntuhr* *uhch-o7*                     *7a-ray* *ma7*  
now.EXCL   DET-OST   other     before.EXCL-TD.DIST   DET-ND   NEG1  
'Now (this time), that other one, not this one'  
[cuando nacio\* mi hija, UCLAK]

Initially, I was confused by the passage and had a difficult time trying to translate it. The speaker had emphasised being in pain so much, that I interpreted the phrase in (5.12) to mean that she was not in pain now (i.e. at the time of telling the story) but only at the time of giving birth to her child.

My current understanding of the utterance viewed from the perspective of the present discussion where CChNK is switching to talk about another comparable event (i.e. when she gave birth a second time), is supported by the fact that she has given birth to more than one child and that at least two of them had been born at the time of



recording the story. A more revealing and detailed translation of (5.12) would read: ‘This time, this other (occasion), not that one (that I was talking about)’.

The use of *b’aje7* as a “temporal ostensive” form to make reference to events or time periods has not been reported for either Yukatek (cf. Hanks 1990; Vapnarsky 1999. Bohnmeyer 1998), nor Itzaj (Hofling 2000). In Itzaj the ostensive ID *je7* is used together with *k’in* (‘day’, ‘sun’) to refer to a specific time, forming the expression *a7-k’in je7-lo7-eh*, ‘(from) that day/time’ (Hofling 1991: 62). A corresponding construction is unattested for Lakandon. It is a grammatical construction that speakers are able to decipher, but it is not used by speakers of Lakandon.

There is a special referential form of *b’aje7(re7)* that also assumes an asymmetry between the speaker and addressee in presenting personal information, namely *7asta b’aje7re7* (Sp. *hasta* ‘until’). It can be translated as ‘until now’, meaning ‘still’, or ‘to this day’. *7asta b’aje7re7* has the same indexical ground (i.e. asymmetrical knowledge between the speech participants), but it includes reference to a *previous state* of affairs that has not changed since, i.e. some state of affairs used to be in a certain way and has continued to be like that until today. This additional feature means that the information is directly available to be experienced by the addressee, and that it lacks a contrast to a previous state.

Two examples of this expression come from the a recording where KYYM is telling me about his childhood and what it was like growing up in the colonial capital San Cristóbal de las Casas:

(5.13)a *in-teet yejer in-na7 uhch tu7 b’in jach kajar-o7b’*  
 1SG.A-F with 1SG.A-M before.EXCL where go true live-3PL.B

*ich san.kintin*

LOC TN

‘My father used to live with my mother in San Quintín’

b *a-ti7=t(ahr)-o7 7asta b’aje7re7 san.kintin u-k’aab’a7*  
 DET-SP.ANA=SP.R.DIST-TD.DIST until(Sp.) now.EXCL TN 3SG.A-name

*b’axik a-k’a7k’.naab’ peetja7 u-k’aab’a7 laguuna.miramar*

like.that DET-sea lake 3SG.A-name TN(sp.)

‘There, even today it is called San Quintín, like the lake is called Lake Miramar’

- (5.14)a *k'äx-a7n u-iglehsia*  
 tie-PARTC1 3SG.A-church(Sp.)  
 'A church was made'
- b *tu7 k-u-kisin=tahn-b'aj-o7b' tz'uhr uhch*  
 where INC-3SG.A-devil=in.front-REFL-PL foreigner before.EXCL  
 'Where the people (foreigners) fought before'
- c *ti7 yaan asta b'aje7re7*  
 SP.ANA EXIST until now  
 'There it still is'
- d *santo.domihngo.karidad*  
 TN(Sp.)  
 'The Santo Domingo monastery'
- [HB050211\_1KYYM\_1]

The marking of generic information as in (5.13) and (5.14), which is easily accessible for confirmation by anyone, is also referential since it lacks exclusive access through the speaker's personal memory and experience. However, in another story also by KYYM, *asta b'aje7re7* is used to mark a generic state (one that has not changed), which is quite inaccessible to the addressee because of its mythological nature:

- (5.15)a *yuhm k'ahx raji7 u-yäj-känaj yäj-ihr k'ahx*  
 lord forest 3SG.IND 3SG.A-AGNT-guard AGNT-NOM forest  
 'The lord of the jungle is the one who watches over the jungle'
- b *asta b'aje7r-e7 yuhm=k'ahx yaan*  
 until(Sp.) now-TD.ANA lord=forest EXIST  
 'The lord of the forest still exists'
- c *k-u-räk=ir-ik-Ø ehk'=xuux k-u-räk=ir-ik-Ø*  
 INC-3SG.A-all=see-PLN-3SG.B black=wasp(?) INC-3SG.A-all=see-PLN-3SG.B
- t-u-kootor t-u-kootor t-u-kootor b'äk' [kuräk]*  
 PREP-3SG.A-every PREP-3SG.A-every PREP-3SG.A-every meat  
 'He watches over the lynx, he watches over each and every single animal'
- d *raji7 känah-t-ik-Ø*  
 3SG.IND guard-TR-AF-3SG.B  
 'He takes care of them'

e *b'axik* *y-a7r-ik-Ø* *ik-nuuk-ir* *uhch-o7*  
 like.that 3SG.A-say-PLN-3SG.B 1PL.A-great-POSS before.EXCL-TD.DIST  
 'That's what the ancestors said'

[HB050228\_1KYYM\_2]

In (5.15e) the relationship between the speaker and the information that he relates is confirmed in the reference to the source of the narrative, namely that it was told by someone else. This last comment does not make the information *reported* since that would require another type of marking (*b'in*), but it marks the story as generally known and accepted. The addressee is not included in the group that is expected to have knowledge of such facts, which is the motivation for using the expression *asta b'aje7re7* in the first place.

#### 5.2.1.4 Contrastive to directly inaccessible experience

*b'aje7* can also be used to indicate a contrast to another event or state. The communicative functions available for this form of *b'aje7* include the three that are discussed above; *presentation of personal knowledge*; *directing the attention focus of the addressee*; and *referential*. It may be used to signal an asymmetry of knowledge between the speech participants, but does not have to.

The relational value of this form is *contrastive to directly inaccessible experience* (cf. 5.1.2.3), which means that it denotes a state that is different from a previous or later state that presently is inaccessible to direct experience by both speech participants. However, as stated in section 5.1.2, this relational value is not found on a lexical level since it requires morpho-syntactic additions to achieve this function (but see below, 5.16)

The most prototypical meaning of *b'aje7* is 'today'. As such, it is most readily contrasted with 'tomorrow' and 'yesterday'. An elicited example is seen in (5.16) below:

- (5.16) *baje7* *k-in-b'in* *inw-a7r-Ø-Ø* *teech*  
 now.EXCL INC-3SG.A-go 1SG.A-say-DEP-3SG.B 2SG.IND  
  
*a-sahman-w-o7* *ma7 a-taar*  
 DET-tomorrow-E.DEP-TD.DIST NEG1 2SG.A-come  
 'I am telling you today, not to come tomorrow'

[Field Notes, MChKY]

The topicalised form, *7ab'aje7(re7)*, is by its form distinguishable from *b'aje7* as a marker of personal knowledge and a director of the attention of the addressee. The result of the topicalisation of an adverb such as *b'aje7* is a temporal contrast to another time period or state. This “other time” is often represented by *7uhch* (‘previously’) in its topicalised form, *7auhcho7*, which can be translated as ‘previously (but not anymore)’. An example of this contrast between states is presented in (5.17). In one recording, KYYM is talking about what San Cristóbal de las Casas used to be like when he was growing up some 40 years ago. He points out some differences between what the town used to be like, and what it is like presently:

(5.17)a *yaan u-k'ahx-ir yaan k'ahx tzooy*  
 EXIST 3SG.A-forest-POSS EXIST forest beautiful  
 ‘(San Cristóbal) used to have a forest, there was a beautiful forest’

b *7a-b'aje7r-e7 mana7 u-k'ahx-ir*  
 DET-now-TD.ANA NEG.EXIST 3SG.A-forest-POSS  
 ‘Now there is no forest’

c *a-uhch-o7 ka7 k'uch-een.o7b' uhch*  
 DET-before.EXCL-TD.DIST when arrive-1PL.EXCL.B before.EXCL

*yaan u-k'ahx-ir*  
 EXIST 3SG.A-forest-POSS  
 ‘Back then, when we arrived, there was a forest’

[HB050225\_1KYYM\_3]

EChK tells a story about how an ancestor made a deal with the “Siren” of the river, and traded his son for good catches of fish. In (5.18) and (5.19), *7ab'aje7* is contrasted with an overt expression (*-mäk'*=, ‘always’), and one (5.19) that depends on the previous context to serve as a contrast.

(5.18)a *y-a7r-aj-Ø t-uy-oor tahn u-b'in*  
 3SG.A-say-CP-3SG.B PREP-3SG.A-mind DUR 3SG.A-go

*tahn u-tuk-r-ik-Ø yaan in-b'in ich in-kiik a-b'aje7*  
 DUR 3SG.A-think-TR-PLN-3SG.B OBL 1SG.A-go LOC 1SG.A-oZ DET-now  
 ‘He said, he thought, he was thinking; I have to go with my sister now.’

b *in-mäk'=b'in chiich yet ichk-ir*  
 1SG.A-always=go MM with bathe-PLN.IV  
 'I always go bathing with my grandmother.'

(5.19) *ki yoor u-teet y-a7r-aj-Ø yaan ich kooch käy*  
 good mind 3SG.A-F 3SG.A-say-CP-3SG.B EXIST LOC large fish

*a-b'aje7 kij*  
 DET-now.EXCL QUOT  
 'His father was happy, he said; now there is fish, he said.'  
 [HB040909\_1EChK\_6]

In procedural or descriptive narratives we have already noted the use of *b'aje7* to direct the attention of the addressee. In descriptive narratives, the topicalised *ab'aje7* serves two purposes; to contrast a new activity to a previous, terminated stage, and to present new information in order to direct the attention of the addressee like the speaker would do using *b'aje7*. Example (5.20) illustrates the variation in communicative function of *7ab'aje7*.

(5.20)a *tzehn wa7 k-u-tz'o7k-or a-p'ar-ik-Ø*  
 slow COND INC-3SG.A-finish-PLN.IV 2SG.A-cut-PLN-3SG.B  
 'Slowly, if you have finished, you cut it off'

b *a-b'aje7 yaan (i)j-ihx-t-ik-Ø u-k'aax*  
 DET-now.EXCL EXIST 1PL.A-knot-TR-PLN-3SG.B 3SG.A-string  
 'Now I have to tie the string'  
 [HB040925\_1EChK\_1]

Negating *7ab'aje7(re7)* results in a meaning that is very close to the opposite contrastive *7auhcho7* ('previously, but not anymore'; section 5.3). In an explanation that EChK offered me, regarding expressions that people used to greet each other with in the morning, *7ab'aje7* is first negated (5.21a) to mark a greeting practice that has been abandoned. In the following phrase (5.21b), the negated expression is "corrected" into the form *7auhcho7*, which refers to the same state as *ma7 7ab'aje7*. EChK's wife, ChN assists him in the explanation:

(5.21)a E: *k-u-saas-tahr ma7 a-b'aje7 p'aht-ar*  
 INC-3SG.A-light-ASSUM NEG1 DET-now.EXCL leave.CPASS-PLN.IV

*b'ik (ik-)k'än-(i)k-Ø-e7x*

how (1PL.A-)use-PLN-3SG.B-2PL.B

'In the morning, not anymore, we stopped using it like that'

- b E: *a-uhch-o7* *ma7 b'a7yik t-aw-ir-aj-Ø*  
DET-before.EXCL-TD.DIST NEG1 how COM-2SG.A-see-CP-3SG.B

*teech kij*

2SG.IND QUOT

'Before, (we did) not (say): 'how did you see?', we said'

- c ChN: *jee~ b'ay t-aw-ir-aj-Ø* *teech*  
yes what COM-2SG.A-see-CP-3SG.B 2SG.IND  
'That's it, what did you see? (is what we used to say)'

- d E: *jee~ b'ay t-aw-ir-aj-Ø* *teech*  
yes what COM-2SG.A-see-CP-3SG.B 2SG.IND  
'Yes, what did you see?'

- e E: *mana7 ba7 t-inw-ir-aj-Ø* *mana7*  
NEG.EXIST thing COM-1SG.A-see-CP-3SG.B NEG.EXIST  
'Nothing, I did not see anything'

- f ChN: *mana7 b'a7 t-inw-ir-aj-Ø* *b'aje7*  
NEG.EXIST thing COM-1SG.A-see-CP-3SG.B now.EXCL  
'I did not see anything'

[HB040904\_1EChK\_10]

In (5.21f) we have another clear example of how *b'aje7* is used to assure the addressee of the truth of some event that is presently accessible to the speaker but by being a personal experience (a dream), excludes the addressee from having equal access to that experience.

The pragmatic function of *b'aje7* to signal a knowledge asymmetry between the speaker and the addressee has resulted in what can only be considered as encoded semantics. In direct translation, *b'aje7* is translated as *hoy*, 'today' or *ahora*, 'now' but these translations are deceptively simple, because although they appear obvious, their referential meaning features non-temporal semantics.

The prototypical situation where the use of *b'aje7*, being an equivalent to 'now', is called for, is when the speaker wants to make reference to some presently accessible information or event that the addressee is unaware of. In signalling this kind of asymmetry, the meaning of *b'aje7* is not only temporal, but indicates the perspective of

the speech participants. Only when *b'aje7* is used to contrast one event with another temporally do we get a weighting towards a more clearly temporal meaning. Even in this latter case, knowledge asymmetries may still be present.

Following this, what are the forms and/or constructions that are used to indicate *knowledge symmetry* with regard to directly accessible events? We will take a look at this situation in the section below.

### 5.2.2 PRESENT: symmetrical knowledge

There are many ways to divide the “present” by using words and expressions that correspond to ‘just’, ‘soon’, and ‘a (short) while ago’. However, if we are looking for an expression denoting directly accessible experience that supplies us with the opposite of knowledge *asymmetry* between the speaker and the addressee (section 5.2.1), i.e. knowledge *symmetry*, such expressions do not fit the description.

There is more than one way to make reference to directly accessible information that is accessible to the speaker and the addressee equally. Since this is “given” information in one sense (although not with regard to elements in the discourse but with regard to the assumed knowledge of the speech participants) one way is to leave such an utterance unmarked.

The default temporal location is ‘now’, which in a tenseless language like Lakandon can be left “unspecified” both with regard to AM-marking and time adverbs. In addition, already accessible information is expected to be less prominently marked if compared to the reverse situation for obvious reasons.

One strategy for marking symmetric access to some event is to use the adverbial marker *tok* that was introduced in section 4.2.1. *tok* can be incorporated into the verb phrase or be placed outside of it, at least in NL (see section 4.2.1 and 4.2.2). It functions as a modifier to mark information that the speaker has reason to assume the addressee is familiar with. However, *tok* is not a proper time word since it can be used to mark both past and present events. Following from this, it cannot answer when-questions. As we shall see below, these are both features that *tok* shares with other time words in Lakandon.

#### 5.2.2.1 Referential

A referential use of *tok* is the most common one. This communicative function makes reference to an event that the speaker assumes the addressee to be familiar with. Below

is an extract from a story where KY is the primary narrator and EChK, his father, assists him in the telling of it. *toj*, being a phonological variant of *tok*, is featured on an already uttered phrase, thus marking a repetition. KY does not do this to remind anyone of what he said, but rather because he is trying to piece together a story that he has trouble remembering. He is primarily addressing his father EChK in this segment, who knows this story but who wants KY to try and remember it and tell it to me:

- (5.22) *t-inw-ahn-t(-ik)-eech*      *t-a-juhch'*      *toj*  
 DUR-1SG.A-help-PLN-2SG.B    PREP-2SG.A-grinding    now.INCL  
  
*ma7 taar-a7n a-taar t-a-juuch'*  
 NEG1 come-PARTC1 2SG.A-come PREP-2SG.A-grinding  
 'I will help you grind: "but you never come to (help me) grind!"'  
 [HB040917\_1EChK\_9]

The somewhat awkward situation of having to recount a story that someone else who is sitting with you knows better, results in a narrative stance where many phrases are marked with *toj* effectively labelling the utterance as already known to the addressee.

As in the case of *b'aje7*, the particle *toj* is directed at the addressee and does not relate to any of the characters of the story. Even though it lacks temporal content it shares the function that *b'aje7* has in addressing the participant(s) of the speech situation itself rather than functioning as a discourse device.

*toj* is, however, also found in stories where it marks information that is familiar to the participants of the story, thereby constituting a transposed use. In example (5.23), the story is about a man who is molested by an owl after he burns the head of a witch who was also the man's wife and who flew off repeatedly with the owl during the night. The man seeks the help of the vulture who manages to trick the owl and eventually dump it into the ocean. In the example, the vulture has come back to tell the man about the fate of the owl.

- (5.23)a *a7r-a7b' ti7 tehm ch'oom a-b'ahyw-o7 kij*  
 say-CPASS PREP by vulture DET-like.this-TD.DIST QUOT  
  
*mana7 a-b'uj tuhn-o7 kij toj=kihm*  
 NEG.EXIST DET-owl then-TD.DIST QUOT now.INCL=die  
 'He was told by the vulture: Now, he said, the Owl is no more, he said. He is dead.'



b *b'in-een in-pur-ej-Ø ich k'ahk'.naab'*  
 go-1SG.B 1SG.A-leave-DEP-3SG.B LOC sea

*ma7 u-b'in uhr a-r(a7)-o7*  
 NEG1 3SG.A-go return DET-3SG.IND-TD.DIST  
 'I went and dropped him in the sea. He is not coming back.'

c *jaj kij ik-nuuk-ir*  
 true QUOT 1PL.A-great-POSS  
 'Very well, said the ancestor.'

[HB050211\_3KYYM\_1]

In (5.23) the vulture, as the speaker, tells the ancestor-man that he has done what the man asked him, namely to throw the owl into the sea. By first saying that “the owl is no more”, he then incorporates *toj* into the verb-phrase containing *kihm* (‘die’) to further elaborate what he has already told the man and state that the owl is dead. When the vulture says that the owl is dead he states this fact as something that is known although the source of this knowledge was provided by the vulture himself only in the previous utterance.

#### 5.2.2.2 Remind

The communicative function reserved for expressions that indicate an indexical symmetry relation between the speech participants is *remind*. When a speaker makes reference to some information that he expects the addressee to be familiar with, he may do this in a general, non-specific way, or he may wish to point out something that he expects the addressee to remember more specifically.

In example (5.24) this is the situation that *toj* occurs in. The extract is from a story where a father repeatedly tells his sons to take care of themselves when they are out hunting in the jungle. He tells them to “tie their arrows well” and for the older brother to look after the younger one. He says:

(5.24) *toj=kä7n-ä7 te7x a-b'äj*  
 now.INCL=guard-IMP.IV 2PL.IND 2SG.A-REFL  
 ‘Take care of yourselves! (at night)’

[HB040917\_1EChK\_12]

*toj* works as a reminder of something that the father has told the two boys repeatedly. In the end, it does not go so well for the two boys since they run into the King Jaguar who

takes the younger brother when he sleeps. The remaining brother returns to tell his father what happened. The father scolds his older son saying, “I told you so”:

- (5.25) *toj=a7*                      *teech*    *kij*  
 now.INCL=say.IMP.IV 2SG.IND QUOT  
 ‘I told you! he said.’ (Sp. *te dije antes*)
- ma7 a-kib’(-aj)-Ø*                      *in-t’aan*    *kij*  
 NEG1 2SG.A-believe-CP-3SG.B 1SG.A-word QUOT  
 ‘You didn’t believe me, he said’  
 [HB040917\_1EChK\_12]

As the Spanish translation suggests in (5.25), the remind function paired with an indexical symmetry is translated by means of a time word in the target language, Spanish, where ‘antes’ (‘before’, ‘previously’) is used to indicate the assumed prior knowledge of the addressee from the perspective of the speaker although *toj* has nothing to do with projecting a temporal perspective on any of the phrases where it occurs.

The hypothesis that *toj* refers to the assumed knowledge of the addressee is strengthened by the use of a reduplicated expression, *too=toj* that occurs with some imperative phrases.

In (5.26) below, one of my consultants is trying to coax his mother, who at the moment is sitting in front of the microphone, to sing a song that *he* knows that she knows. She does not think that her singing is coming out very well, so she tells him that she does not remember it:

- (5.26)a CChNK: *räk=tu7b’ teen*    *a-uhch-o7*                      *jeh~*  
 all=forget 1SG.IND DET-before.EXCL-TD.DIST yes  
 ‘I totally forgot it. I used to know it, yes...’
- b MChKY: *too=toj=k’äy-ej-Ø*  
 REDUP=now.INCL=sing-IMP-3SG.B  
 ‘Sing it! (the song you know)’  
 [HB050211\_3KYYM\_3]

Initially, one is tempted to think that the phrase *too=toj* has an exhortative function to simply get someone to do something, but the use of the phrase is rejected in other contexts.

For example, if two children are playing in a field and they find a big spider and one of them says ‘touch it!’ and the other responds ‘you touch it!’, it is not possible to use *too=toj*.

(5.27) \*\* *too=tok=tär-ej-Ø*  
 REDUP=now.INCL=touch-IMP-3SG.B  
 [060917 MChKY]

Shared visual access to some object is not comparable to the personal knowledge of the speech participants.

On the other hand, if you want someone to say something, it is permissible to use *too=toj* since that implies the possession of knowledge (by both speech participants) of what it is you want that other person to say. In elicitation, a context was invented where two people see a dead dog that one person’s brother has as his favourite. When they later meet the brother, one says to the other, ‘tell him!’, referring to what they had seen.

(5.28) *too=tok=a7r-ej-Ø*  
 REDUP=now.INCL=say-IMP-3SG.B  
 ‘Tell him!’ (what you saw)  
 [060917 MChKY]

The expression *too=toj* can be substituted by the non-reduplicated *tok* without a noticeable change in meaning:

(5.29) *tok=a7r-ej-Ø*  
 now.INCL=say-IMP-3SG.B  
 ‘Tell him!’  
 [060917 MChKY]

It appears from the same elicitation that the knowledge of the speaker about what the addressee knows is necessarily present in the form *tok*. This implies that you would be unable to use *tok* or *too=tok* if you want the addressee to tell you something that you do not know anything about. I regret to say that I have yet to test this last implication with a speaker.

Why is *tok* discussed as a particle marking temporality when it cannot answer a when-question? As I have tried to make clear in the discussion so far, it would be an *ad*

*hoc* assumption to illustrate and discuss time reference in Lakandon Maya by only including adverbs that function as proper time words in this sense. The inclusion of *tok* and similar particles like *ka7ch(ik)* is due to the fact that many time expressions are contrasted by, and used in complementary distribution with adverbs that lack a purely temporal semantic content but which are none the less translated and discussed in terms of temporality. The metaphorical use of time expressions to discuss and describe knowledge asymmetry markers is further discussed in section 5.6.

To restrict the discussion to lexemes that have been treated and described previously in the Yukatek literature as time adverbs would be overlooking important information and restricting the discussion to parameters of meaning that fail to adequately describe time reference as it occurs in everyday Lakandon Maya speech.

### **5.3 PAST: directly inaccessible experience**

The presence of indexical asymmetry as a salient feature of time words in Lakandon was first observed in forms used to make reference to “past” events. It was in the distribution patterns of one specific expression, *7uhch*, that I began to entertain the possibility that there was something else present than strictly temporal features in the semantics of *7uhch* (cf. Bergqvist 2006). It is also in the “past” forms that these features can be seen most clearly.

The division into speaker- and event-perspective that was introduced above in section 5.1.2.4 is not only seen in the use of different forms but also in the use of identical forms with separate functions. In this section, we will discuss the functions that reflect a speaker-perspective. Event-perspective reference to directly inaccessible experience will be treated in section 5.5.

This section will be identically structured compared to section 5.2: first asymmetrical access to past events and accompanying communicative functions will be described before we turn to indexical symmetry in 5.3.2.

#### **5.3.1 PAST: asymmetrical knowledge**

Reference to past events, or directly inaccessible experience, is also structured by the three dimensions outlined above in section 5.1.2. In this section and the following (5.3.2) we will look at two related expressions, *7uhch* (‘previously’, ‘before’) and *ka7chik/kuhch* (‘previously’, ‘before’), whose functions and features support the previously discussed correspondence between deictic categories.

The most important difference between these two expressions and *b'aje7*, which is investigated in some detail above, is that *7uhch* and *ka7chik/kuhch* marks information as *inaccessible to direct experience*. The communicative functions *personal knowledge* and *referential* are available to these forms, but not the *directive*, since that would entail an immediate availability that is contradictory to a “past”, inaccessible event.

The asymmetry feature of the indexical ground is also salient in the description of *7uhch*. *7uhch* is used for past events and states that the speaker and the addressee have *asymmetrical access* to. That the indexical ground relating to past experience is equally differentiated compared to present experience, is predicted and in part supported by Hanks' findings for the ostensive forms of Yukatek.

A socio-centric perspective is present in the description of past eventualities and the speaker needs to take the beliefs of the addressee into account to make proper reference to them.

#### 5.3.1.1 Presenting personal knowledge

*7uhch* has the same function as *b'aje7* in marking information that the speaker assumes the addressee is unfamiliar with. The communicative function achieved by the presence of *7uhch* can be the presentation of personal information, or making more general reference to some event that was experienced or is known to others, not including the addressee. A good place to find *7uhch* as a marker of personal knowledge is in personal narratives, especially ones where an inner, or mental experience is related.

The first example of this is from the by now familiar story told by CChNK about the time when she gave birth to her first child and the pain she experienced then (see section 5.2.1). The speaker directs her story towards Una and almost every phrase is accompanied by *7uhch*. The desire to convey a personally experienced situation that is inaccessible to direct experience, and which is previously unknown to the addressee, results in a frequent use of *7uhch* to mark the events described:

(5.30)a *ya, 7a-je7 ka7 7in-rooch-aj-Ø 7uhch-a7*  
 already(Sp.) DET-OST when 1SG.A-cradle-CP-3SG.B before.EXCL-TD.PROX  
 ‘OK? This one [time] when I gave birth’

b *7oor inw-a7(r)-ik-Ø t-in-b'aj 7uhch*  
 mind 1SG.A-put-PLN-3SG.B PREP-1SG.A-REFL before.EXCL  
 ‘I was on the verge of tears’

- c *mu7k yaj ka7 7in-rooch-aj-Ø 7uhch*  
 strong pain when 1SG.A-cradle-CP-3SG.B before.EXCL  
 'I was in a lot of pain when I gave birth'

[...]

- (5.31)a *chichan ka7 7in-rooch-aj-Ø uhch*  
 little when 1SG.A-cradle-CP-3SG.B before.EXCL  
 'I was a child when I gave birth then'

- b *je7 in-rooch-aj-Ø ka7 ki7 inw-oor uhch*  
 OST 1SG.A-cradle-CP-3SG.B when good 1SG.A-mind before.EXCL  
 'It is true that I was happy giving birth'

- c *ka7 ki7 7inw-oor ye7 uhch*  
 when good 1SG.A-mind with before.EXCL  
 'then I was happy'

- d *mix b'eje7 juhntu7 juhntu7 uhch-o7*  
 NEG2 now.EXCL other other before.EXCL-TD.DIST  
 'But not this time, the other, the other one'

[Cuando nació mi hija, UCLAK]

In Bergqvist (2006), the possibility that *7uhch* is a tense marker is considered and rejected (see also 4.1.3). There are no good arguments for viewing the free-standing adverb *7uhch* as a tense marker. It is *7uhch* in the form of an adverbial aspect marker that takes care of the temporal positioning of an event, *conveying* a temporal distance with regard to the time of utterance (cf. section 4.1.3).

In (5.31), the speaker wishes to contrast the first time she gave birth, and was in pain, with the second time when she was more at ease. However, the contrast cannot be seen in the use of *7uhch*, since it is present to mark both events. The contrast is instead achieved partly by using the TDs *-a7* (5.30a), and *-o7* (5.31d), and partly by the use of *b'eje7*<sup>30</sup> (5.31d). The two terminal deictics have the same function that Hanks attests for Yukatek where *-a7* refers to inaccessible information, and *-o7* refers to an already introduced referent, or a contrastive one in this instance. The same example is also analysed in 5.2.1.3, above, where the ostensive function of time deictics is discussed.

The combination of *7uhch* with terminal deictics such as *-a7* and *-o7* as seen in (5.30) and (5.31) cannot be described in terms of temporal distance. They must be

<sup>30</sup> *b'eje7* is a phonological variant of the already discussed *b'aje7*.

understood as referring to events in relation to each other on a *discourse level*. The function and meaning of *7uhch* is independent of the terminal deictics that attaches to it. From Vapnarsky's report on what function the terminal deictics have in expressions of temporality, it appears that the situation is different in Yukatek where both *-a7* and *-o7* have a role to play in the semantics of the adverb *7uhch* (Vapnarsky 2000: 200-206; see also section 6.2.1).

Another example comes from a descriptive narrative where EChK is showing me how to tie arrows while I videotape the whole demonstration. In the example, EChK says there was a time when he could not tie arrows and was taught how to do it by his father, but that he was afraid to do it until he learned it properly:

- (5.32)a *b'a7ik y-e7s(-ik)-Ø in-teet in-tz'aj-(i)k-Ø*  
 like.this 3SG.A-show-PLN-3SG.B 1SG.A-F 1SG.A-break-PLN-3SG.B

*u-took'-ir*

3SG.A-flint-POSS

'This is how my father taught me how to break (flint),'

- b *pero uhchik-e7 saj-k-een-Ø p'ihk-ir*  
 but(Sp.) before.EXCL-TD.ANA fear-DEP-1SG.B-3SG.B crack-NOM

*u-took'-ir*

3SG.A-flint-POSS

'but I used to be afraid of cracking the rocks,'

- c *k-u-läk=p'ihk-ir k-u-yuhp'-ur*  
 INC-3SG.A-all=crack.MPASS-PLN.IV INC-3SG.A-break.MPASS-PLN.IV  
 'They all crack, they break'

- d *a-b'aje7 mana7*  
 now.EXCL NEG.EXIST  
 'Now I am not (afraid)

- e *wa7 t-in-kä7n-äj-Ø in-tz'a7j-ik-Ø*  
 or COM-1SG.A-learn-CP-3SG.B 1SG.A-break-PLN-3SG.B

*ma7 in-säj-t-aj-Ø*

*(7a-)uhch-o7*

*saj-k-een-Ø*

NEG1 1SG.A-afraid-TR-CP-3SG.B (DET-)before.EXCL-TD.DIST fear-DEP-1SG.B-3SG.B

'Since I learned how to break them, I am not afraid of it, but I used to be afraid'

[HB040925\_EChK\_1]

In the examples of *7uhch* in (5.32b) and (5.32e), there is also a contrast present to another time, corresponding to the one discussed for *ab'aje7* (above). This means that they have a different relational value, namely *contrastive to directly accessible experience*. However, the narrative has the communicative function of conveying the speaker's personal experiences that of course are exclusive to him.

Personal experience does not have to consist of emotional or mental states. It can be an experience that is exclusive to the speaker if he was alone in doing something. An example of this comes from a transposed example where EChK tells the author what his son had told him about a stereo he wanted to buy.

- (5.33) *y-a7r-aj-Ø*                      *k'uch*    *y-ir-ej-Ø*                      *yaan*    *k'ootaj*    ***uhchik***  
           3SG.A-say-CP-3SG.B    come    3SG.A-see-DEP-3SG.B EXIST    stereo(?)    before.EXCL  
           'He said, he went to look (for the stereo) where they used to have a stereo'  
 [HB041023\_1EChK\_3]

Instead of describing a mental state, (5.33) is more akin to stating information source, or *evidentiality*, in that it refers to an occasion when KY had seen a stereo in a shop that he later wanted to go back and buy. This is however a contextually dependent feature that is absent in the encoded meaning of *7uhchik*.

Related to (5.33) is the example in (5.34). It is a personal narrative told by KYYM, about his childhood and his family. Again, this is not really exclusively personal information but since KYYM is quite old (~59 yrs), and everyone he talks about is dead, what he tells the author is not known first hand information to anyone but himself.

- (5.34)a *7in-chaan=maam* *7u-k'aab'a7*, *7u-k'aab'a7*    *b'oor*, [...]  
           1SG.A-FF                      3SG.A-name    3SG.A-name    PN  
           'My grandfather's name, his name was Bor'  
  
       b *7a-in-chiich*                      *7u-k'aab'a7*    ***7uhch***                      *naj.b'oor-a7*  
           DET-1SG.A-FM    3SG.A-name    before.EXCL PN-TD.PROX  
           'My grandmother's name was Naj Bor'  
 [HB050211\_1KYYM\_1]

Only the name of the person who the speaker remembers is marked with *7uhch*, namely the speaker's grandmother. The speaker does not remember the grandfather's name with the same confidence and he hesitates when stating it, whereas the name of his



grandmother comes to him without pause<sup>31</sup>. This asymmetry in marking illustrates the fact that only information that the speaker remembers, or can claim as personal knowledge, is marked with *7uhch*.

In the same story that (5.34) is taken from, KYYM continues to describe what life was like in the place where he was born:

- (5.35)a *7a-Lacanjá7-o7 t-u-kihn-s-Ø-o7b' 7u-b'äj*  
 DET-TN-TD.DIST COM-3SG.A-kill-CAUS-3SG.B-3PL.B 3SG.A-REFL  
*yejer mahskab' mahskab' k-u-k'än-ik-Ø*  
 with machete machete INC-3SG.A-use-PLN-3SG.B  
 'In Lacanjá, they killed each other with machetes, they used machetes'
- b *7a-xohkraj uhch-o7 k-u-räk=k'än-ik-Ø yejer järär*  
 DET-TN before.EXCL-TD.DIST INC-3SG.A-all=use-PLN-3SG.B with arrows  
*kir u-kihn-s-aj=tahn-b'aj-o7b'*  
 for 3SG.A-kill-CAUS-CP=front-REFL-PL  
 'At Lake Miramar, they used arrows to kill and fight with each other'
- [HB050211\_1KYYM\_1]

In the adjacent utterances (5.35a) and (5.35b), the name of the place where the speaker lived and knew people had been killed, has *7uhch* attached to it (5.35b), while the name of the place where neither the speaker nor his father lived at the time (5.35a), *7uhch* is absent because the speaker lacks first hand information about what had actually happened there. An identical time frame is called upon in both instances during which the supposed killings took place.

*7uhch* always features an asymmetry of knowledge between the speaker and addressee but it does not always mean that the events or states that *7uhch* accompanies represent the personal knowledge of the speaker. *7uhch* sometimes refers to more general knowledge that a group of people have access to.

<sup>31</sup> The history of KYYM's lineage as presented in section 2.2.3 suggests that KYYM remembers his grandfather's name incorrectly on this occasion. It should in fact be Pancho K'iin. With regard to his grandmother's name, KYYM is more on the spot, but it is his step-grandmother's name that he remembers since his sanguineal grandmother's name was Ixam. However, it is possible that Baer (1971) was misinformed regarding which of Pancho K'iin's wives gave birth to whom.

### 5.3.1.2 Referential

As stated above, the referential function implies personal knowledge but does not emphasise it. Rather, making reference to something that is generally known to others can still require marking by *7uhch* simply because the speaker assumes the addressee has not heard about it before.

An example of this function comes from another recording made by Una Canger, in which the speaker is KYB, the late husband of CChNK. He tells Una about the religious beliefs and traditions that the Lakandones used to practice, but have since abandoned. The information he reports is common knowledge to his, and his father's generation, but since Una knew very little about it (indicated e.g. by asking him to tell her about it) *7uhch* marks many of the phrases in the story:

- (5.36)a *k-in-kib'-ik-Ø-o7b'*                      *7a-teen*                      *uhch-e7*  
 INC-1SG.A-believe-PLN-3SG.B-3PL.B    DET-1SG.IND    before.EXCL-TD.ANA  
 'We used to believe, I (believed) that there existed'
- b *7a-yaan waayan.tākob'*  
 DET-EXIST PN  
 'the God of the Mayas'
- c *raji7 k-inw-a7r-ik-Ø k'uhj-ir*  
 3SG.IND INC-1SG.A-say-PLN-3SG.B    god-DEF  
 'This one I said was God'
- d *t-u-kootor mahk*  
 PREP-3SG.A-someone  
 '(for) everyone'
- e *raji7 k-uy-a7r-ik-Ø 7a-waayan.tākob'-o7*  
 3SG.IND INC-3SG.A-say-PLN-3SG.B    DET-PN-TD.DIST  
  
*b'axik xahn-a7*  
 like.this too-TD.PROX  
 'He, they said, the God of the Maya, this was before'
- f *ta(hr) yaan 7a-säk.ru7m 7uhch-o7*  
 SP.R.EXCL EXIST DET-TN                      before-TD.DIST  
 'there at "White earth" (i.e. the name of the place where KYB grew up)'

g *k-uy-a7r-a7*                      *7uhch-e7*      *7u-paarar chan=yum-o7*  
 INC-3SG.A-say-CPASS    before-TD.ANA 3SG.A-child small=lord-TD.DIST  
 'He was called, "the child of the sun"'

[De los dioses UCLAK]

KYB uses *7uhch* to mark information that is personal knowledge but that is also commonly known to many Lakandones. However, KYB relates the story in a way that lets us understand that the views he expresses there are not the ones he currently entertains. He has since abandoned them in favour of Christianity. He uses the topicalised form of *7uhch*, *7auhcho7*, to accomplish this effect and later in the story inserts *tus*, 'falsely', in many verb compounds to say that what people believed only seemed to be true, but really was lie.

In another story, KYYM tells me what *he* thinks about the Gods of the Lakandones, that he still believes in, and what the Lakandones used to be like in ancient times. What he relates is not widely accepted truths, and KYYM knows this. Regardless, he relates his own beliefs in the matter which originate in traditional beliefs:

(5.37)a *je7r-o7*                      *kux-a7n*    *kux-a7n*    *in-nuuk-ir-o7b'*                      *ti7*  
 OST-TD.DIST    live-PARTC1 live-PARTC1 1SG.A-great-POSS-3PL.B    PREP

*mix y-iim-an*                      *ma7*      *y-iim-an*                      *ik-nuuk-ir*  
 NEG2 3SG.A-?-PLN.IV    NEG1    3SG.A-?-PLN.IV    1PL.A-great-POSS  
 'That is where my ancestors lived, our ancestors did not know (the foreigners)'

b *a-ik-nuuk-ir*                      *uhch*                      *t-u-ki7=ki7=ir-aj-Ø*  
 DET-1PL.A-great-POSS    before.EXCL COM-3SG.A-REDUP=well-see-CP-3SG.B  
 'The ancestors could see very well'

c *a-wa*                      *b'axik*    *ma7*    *u-kihn-s-aj=tahn=b'aj*                      *uhch-o7*  
 DET-COND    like.this    NEG1 3SG.A-die-CAUS-CP=in.front=REFL before.EXCL-TD.DIST

*je7r-e7*                      *a-teen.o7b'*                      *maaya*    *uhch-o7*    *jach*    *nuuk-ir-e7x*  
 OST-TD.ANA    DET-1PL.EXCL.IND    PN                      before.EXCL very    great-POSS-2PL.B

*jach*    *pihm-een.o7b'*    *xa7n*    *uhch*  
 very    many-1PL.EXCL.B also    before.EXCL  
 'If they hadn't killed each other, we Maya were much taller before, there were many of us too'

d *yaja*    *kajar*                      *ti7*    *yaan-o7n.e7x*                      *uhch*  
 large    village    PREP EXIST-1PL.INCL.B before.EXCL

*pihm-o7n.e7x      uhch*

many-1PL.INCL.B   before.EXCL

‘We used to live in the big village (Yaxchilan), and we were many then’

[HB050211\_KYYM\_4]

The use of *7uhch* shows striking similarities to *b’aje7* with regard to both meaning and patterns of use. Although *7uhch* appears more frequently in texts than *b’aje7* this is probably a result of an existing bias in the collected language materials towards personal narratives, rather than representing an actual difference in frequency of use.

### 5.3.1.3 Contrastive to directly accessible experience

The topicalised form of *7uhch*, *7auhcho7*, is typically contrasted with the already investigated *7ab’aje7(re7)* (section 5.2.2). It has the relational value *contrastive to directly accessible experience* and indicates a difference between what something used to be like and what the same entity is like presently. In *7auhcho7* resides the possibility of making reference to something that has *changed*. The changed state presupposes two things, the presently visible state, or the consequence of the change, and the previous and contrastive state that can only be learned about from what people tell you. It is important to note that the change that results in two contrastive states is without any resultative meaning attached to it. The resultative form, *(-)we7*, is discussed below in section 5.5.1.2.

However, *7auhcho7* usually also entails presenting the personal knowledge of the speaker in conveying information as contrastive to directly accessible experience. We have seen examples of this above in (5.32b) and (5.35b). Both *personal knowledge* and *referential* are available communicative functions. I was, for example, told by several persons (on separate occasions) that, “We didn’t use to have a road that went out to Lacanjá”. In Lakandon the phrase was uttered like this:

- (5.38) *7a-uhch-o7                      mana7      u-b’eer*  
DET-before.EXCL-TD.DIST   NEG.EXIST   3SG.A-road  
‘There didn’t use to be a road’  
[Field Notes, EchKY]

There is nothing personal about this information. The expression simply offers an obvious contrast to what is commonly accessible even to the author (because there only

is one road). The effect that the speaker achieves by using *7auhcho7* in reporting something – whether it is personal or traditional knowledge – is the separation of a previous state, from the present. For example, the story that KYB tells us in (5.36) about the former Gods of the Lakandones, is begun by using *7auhcho7* to indicate that whatever follows is not presently relevant or true for the speaker.

As observed by Bohnemeyer (1998), who calls the *ka7ch* in Yukatek a “topic time shifter”, the contrastive temporal operators in Yukatek only refers to states and not events. The same is true for *7auhcho7* in Lakandon. There is a habitual, or extended static element to any eventuality that can be contrasted to another by using *7auhcho7*. If a person says that he used to say something but has since stopped saying it (using *7auhcho7*), then that statement implies that the person has uttered the previous statement several times and that it reflected a belief that he held for more than a moment.

A clear example of how *7auhcho7* contrasts with *7ab'aje7re7* in reference to states, is taken from a personal narrative, also narrated by KYB, about his childhood and how he grew up with his brother KYYM in San Christóbal:

(5.39)a *je7 ka7 räk=b'in-een.o7b' uhch-a7*

OST when all=go-1PL.EXCL.B before.EXCL-TD.PROX  
'That is when we all went'

b *t-u-ka7=tuhr-e7 kaj taar in-teet-e7*  
PREP-3SG.A-two=NCL.ANIM when come.CP 1SG.A-F-TD.ANA  
'The second time my father came back'

c *t-u-päy(-aj)-Ø u-raak'*  
COM-3SG.A-bring-CP-3SG.B 3SG.A-wife  
'he brought his (new) wife'

d *ka7 b'in yejer ich san.kintin*  
when go.CP with LOC TN  
'Then he went with her to San Quintín'

e *b'axik a-je7r-a7-e7 a-uhch-o7 chich(i)n-een*  
like.this DET-OST-TD.PROX-TD.ANA DET-before.EXCL-TD.DIST little-1SG.B

*a-b'aje7r-e7 kareem a-teen-o7*  
DET-now.EXCL-TD.ANA grown.up DET-1SG.IND-TD.DIST

*a-baje7r-e7*                      *inw-o(o)jer*

DET-now.EXCL-TD.ANA 1SG.A-know

'That was what it was like when I was little, now I am big, now I know'

f *b'axik* *inw-eer-Ø*              *yaan*      *mahk*              *käna-t-ik-een*  
like.this 1SG.A-know-3SG.A EXIST someone guard-TR-AF.PLN-1SG.B

*inw-eer-Ø*              *k'uj* *käna-t-ik-een*  
1SG.A-know-3SG.A god guard-TR-AF.PLN-1SG.B

'I know there is someone taking care of me, I know that God takes care of me'

[Cuando murio\* mi mama\*, UCLAK]

In (5.39e) the speaker's childhood is contrasted with his present situation as a grown-up. The difference between marking events with *7uhch* and states with *7auhcho7* is also visible in (5.39a) and (5.39e). In (a) *7uhch* is marking an event where the speaker and his family went together, a non-state, whereas in (e), *7auhcho7* marks the state of being a child, in contrast to his grown-up state.

### 5.3.2 PAST: symmetrical knowledge

In all its communicative functions, *7uhch* indicates an asymmetry of knowledge between the speaker and the addressee with regard to some past eventuality. Regardless if information marked by *7uhch* is commonly known, or if it only reflects the personal knowledge of the speaker, there is always the asymmetry between the knowledge of the speaker and the addressee.

It is, however, also possible for the speaker to make reference to information that is inaccessible to direct experience, but *known to the addressee*. To signal this, the speaker uses one of two adverbs that also have been attested for Yukatek, namely, *ka7ch(ik)* or *kuhch*, depending on whether the speaker speaks the northern (*ka7chik*) or southern (*kuhch*) dialect of Lakandon.

The assumption that the speaker makes regarding the addressee's knowledge of an event is either evident from the immediate speech situation or from the memory of a previous occasion that the speaker has reason to assume the addressee still remembers for whatever reason. Important to note is that what is at stake are the addressee's beliefs as they are *reflected in the beliefs of the speaker*.

With *ka7ch(ik)* and *kuhch* we also find the communicative function *remind*. The presentation of personal knowledge and the direction of the attention of the addressee

are not available communicative functions because of the discussed symmetry of the indexical ground.

### 5.3.2.1 Referential

A referential use of *kuhch* is seen in a story by KYYM. He recounts a trip he made several years ago to Chihuahua in northern Mexico. He told me about the trip in Spanish while we sat at KYYM's house and had a bite to eat. After getting my recording equipment, I asked KYYM to tell me the story again, only this time in Lakandon Maya, so that I could record it properly. From my request to be told the story again, KYYM assumes that I (the addressee) remembered it from the first time. So, even though I did not know Lakandon Maya very well at the time, he addressed me as if I did (a common assumption regarding someone who is there to learn the language):

(5.40)a *je7r-o7 ka7 b'in ich mehjiko*  
OST-TD.DIST when go.CP LOC TN

*b'axik ka7 b'in-een.o7b' yejer in-yuhm ich mehjiko*  
like.this when go.CP-1PL.EXCL.B with 1SG.A-FB LOC TN  
'So when he went to Mexico City, that is when we went with my uncle to Mexico City'

b *ya7b' k'iin ya7b' k'iin*  
many year/sun many year/sun  
'Many years ago, many years ago'

c *ti7 yaan-een.o7b' ich mehjiko yejer in-yuhm peepe*  
PREP EXIST-1PL.EXCL.B LOC TN with 1SG.A-FB PN  
'We were in Mexico with my uncle Pepe'

d *in-yuhm cheen b'in u-ka7*  
1SG.A-FB only FUT1 3SG.A-do  
'Only my uncle was going to go'

e *ich este chiwahwa kuhch*  
LOC this(Sp.) TN before.INCL  
'to Chihuahua (as you already know)'

[HB050328\_1KYYM\_1]

Important to note is the absence of *7uhch* in a narrative context that no doubt would have contained several examples of the marker, had I not already been introduced to the story in Spanish. There are very few instances where *7uhch* is used alongside of *kuhch*

for this reason. However, sometimes this is indeed the case as example (5.41) shows, below.

In an expository narrative by ChN on how to tie baskets, the assumption by the speaker that the addressee is listening to what she is saying, also warrants the use of *ka7chik* when referring to a state that only a few sentences before, in the same conversation, had been marked by *7uhch*. The change in marking is warranted only by a repetition of the same information, not a change of the temporal perspective. The relational value of *7aka7chik* in this example, as the form suggests, is *contrastive to directly accessible experience*. By being topicalised, *ka7chik* takes on the same contrastive properties that we find for *7auhchik* in (5.41a):

(5.41)a *a-uhchik*      *ma7 inw-eer*      *u-chuhn-a7*      *uhchik*  
 DET-before.EXCL NEG1 1SG.A-know 3SG.A-begin.M:PASS-MPASSbefore.EXCL  
 ‘Before, I didn’t know how it was begun (tying a basket)’

b *uhchik*      *ma7 inw-eer*      *(u)chuhn-a7*  
 before.EXCL NEG1 1SG.A-know 3SG.A-begin.MPASS-MPASS

*cheen in-raak’ u-ka7an-s(-aj)-een*  
 only 1SG.A-H 3SG.A-learn-CAUS(-CP)-1SG.B  
 ‘I didn’t know how it was begun and my husband just taught me’

[...]

c *ma7 inw-eer u-chu7n*  
 NEG1 1SG.A-know 3SG.A-begin.CPASS  
 ‘I didn’t know how to begin.’

d *b’aje7 in-kän-an a-b’aje7*  
 now.EXCL 1SG.A-learn-PLN.IV DET-now.EXCL  
 ‘Now I have learned.’

e *ka7 t-inw-u7y-aj-Ø in-kän-ik-Ø ka7*  
 when COM-1SG.A-feel-CP-3SG.B 1SG.A-learn-PLN-3SG.B when

*t-inw-u7y-aj-Ø in-kän-ik-Ø in-chun-ik-Ø*  
 COM-1SG.A-feel-CP-3SG.B 1SG.A-learn-PLN-3SG.B 1SG.A-begin-PLN-3SG.B

*u-ya7ar*  
 3SG.A-basket  
 ‘When I felt that I had learned, when I felt that I had learned to begin the basket,



f *tzooy inw-oor inw-a7r-ik-Ø kaax t-in-juhnan*  
 good 1SG.A-mind 1SG.A-put-PLN-3SG.B ? PREP-1SG.A-alone

*in-chun-ik-Ø*

1SG.A-begin-PLN-3SG.B

‘I was glad, I said: now I can begin on my own.’

g *a-ka7chik ma7 inw-eer chu7un-u7*  
 DET-before.INCL NEG1 1SG.A-know begin.CPASS-CPASS  
 ‘Before (as I have told you), I didn’t know how to begin.’

[HB041025\_ChN\_1]

There is a conversational lag between (5.41b) and the next line seen in (5.41c) where the speaker expands on the story about how she learned to tie baskets. In (5.41c), ChN starts repeating what she has already said in (5.41a). In (5.41f), *ka7chik* refers to the same state of not being able to start tying a basket that was referred to in (a), the difference being that this statement now represents known information that is available to the addressee since it has already been stated only a short while before.

Reference to something that the speaker stated previously is not always as explicit as the example in (5.41). Some general assumptions regarding the background of a story or a narrative may at times be enough for the speaker to mark information with *ka7chik*.

Another example where *ka7chik* refers to information that *the addressee has just supplied the speaker* comes from the already introduced conversation between EChK, his aunt L, and their common relative (cf. section 5.2.1.1). The topic of conversation is the same as in the previous example, namely if EChK is a Christian or not:

(5.42)a L: *a-teech t-aw-ak-s-aj-Ø t-aw-oor*  
 DET-2SG.IND COM-2SG.A-place-CAUS-CP-3SG.B PREP-2SG.A-mind  
 ‘Are you a Christian?’

b E: *teen mana7 t-in-p’ät-aj-Ø b’aje7,*  
 1SG.A.IND NEG.EXIST COM-1SG.A-leave-CP-3SG.B now.EXCL  
 ‘I am not, I gave it up’

c L: *t-a-p’ät-aj-Ø*  
 COM-2SG.A-leave-CP-3SG.B  
 ‘You gave it up(?)’

d E: *uhchik*

before.EXCL

‘Before (I used to be)’

e E: *uhchik* *inw-ak-s-aj-Ø* *inw-oor* *b’aje7*

before.EXCL COM-2SG.A-place-CAUS-CP-3SG.B 1SG.A-mind now.EXCL

*yaan jum-b’uj k’ä7 ya7x=k’iin tu7 in-p’ät-aj-Ø*

EXIST one-NCL.half hand year where 1SG.A-leave-CP-3SG.B

‘Before, I was a Christian, now it is 5 years since I gave it up’

f E: *in-na7 a-ti7 [...] k-u-taar a-ti7*

1SG.A-M DET-PRP INC-3SG.A-come DET-PRP

‘My mother [...] she goes there (to the church)’

g L: *ja7ri7 a-na7 ti7 k-u-taar a-ti7*

enough DET-M PRP INC-3SG.A-come DET-PRP

‘Only your mother she goes there’

h L: *jo7k’-ej ti7 yuhm ohtzir-eech*

go.out-IMP PRP BrS poor-2SG.B

*ma7 t-aw-ak-s-aj-Ø*

*t-aw-oor*

NEG1 COM-2SG.A-place-CAUS-CP-3SG.B PREP-2SG.A-mind

*a-je7 t-a-p’ät-aj-Ø*

*b’aje7*

DET-OST COM-2SG.A-leave-CP-3SG.B now.EXCL

*u-p’ät-aj-Ø*

COM-3SG.A-leave-CP-3SG.B

‘Go out (to it) son-in-law! poor thing, you do not have the faith, you have lost it, he has lost it’

i E: *ehl a-b’aje7 t-in-p’ät-aj-Ø yuhm*

SS DET-now.EXCL COM-1SG.A-leave-CP-3SG.B god

‘That’s right, now I have left God’

j L: *wa ma7n a-p’ät-ik-Ø ka7chik*

Q PERF 2SG.A-leave-PLN-3SG.B before.INCL

‘Why on earth have you left it?’

k E: *t-in-chun inw-u7k’-ik-Ø*

COM-1SG.A-begin.CP 1SG.A-drink-PLN-3SG.B

‘I began to drink’

[HB050319\_EChK\_1]

The statement in (5.42j) refers back to what EChK has just told L in (5.42d) and (5.42e). L is informed by EChK that he no longer is Christian and when she asks him why he has left the faith, she (as the speaker) marks her question with *ka7chik* since this is information that came directly from the addressee, EChK. As a comment to the utterance in (5.42k), EChK is not a heavy drinker by any means, he simply grew tired of having the people of the congregation tell him that he could not drink alcohol.

According to the interpretation given for (5.42), it seems that *ka7chik/kuhch* does not mark information as completely symmetrically accessible. Both forms are used to indicate a indexical shift towards the addressee, but because of examples like (5.42), *ka7chik/kuhch* do not necessarily indicate equal access to information between the speaker and the addressee. The level of symmetry is decided by the context.

Finally, I include an example of making reference to something the addressee knows without mentioning, or asking for, exactly *what* the addressee said. This use of *kuhch* constitutes an unspecified referential use of the expression:

- (5.43) *b'a7wir ka7 aw-a7r-aj-Ø ti7 a-suku7un kuhch-e7*  
 why SUB 2SG.A-say-CP-3SG.B PREP 2SG.A-oBr before.INCL-TD.ANA  
 'Why did you tell your brother?'  
 [HB050211\_3KYYM\_2]

### 5.3.2.2 Remind

One common situation where *ka7ch(ik)* or *kuhch* is used, is if the addressee has been told something by the speaker and the speaker makes reference to the already mentioned event again. A precise translation of *ka7ch(ik)* or *kuhch* in this context, is 'previously, as I have already told you'. The communicative function is *remind*, which is also found in the use of *tok* described in section 5.2.3.2.

There is one example where the (transposed) speaker in a story refers back to something that the addressee should remember from what the speaker said on a previous occasion. The example is from a traditional story where one of the characters scolds her sister-in-law for telling on her to her husband:

- (5.44) *t-inw-a7r-aj-Ø tee ch kuhch-e7 ja7wän*  
 COM-1SG.A-say-CP-3SG.B 2SG.IND before.INCL-TD-ANA BrW

*ma7 a-tak-ik-Ø in-jo7 ti7 in-maam*

NEG1 2SG.A-hit-PLN-3SG.B 1SG.A-head PREP 1SG.A-H

'I told you previously, sister-in-law, not to tell on me to my husband!'

[HB050728\_AChKYK\_1]

Example (5.44) exemplifies reference to shared knowledge in a way that is almost parallel to example (5.43) from above. The difference can only be found in the communicative function where a *referential* use (5.43) is contrasted to a *reminding* one (5.44).

In a traditional narrative by KYYM, *kuhch* is used to mark information that is implicitly present in the story but which serves to indicate an effort on behalf of the protagonist to remind himself of something. The story is about "the Siren", or "the Queen of the river" who abducts a Lakandon man from the river's edge, so that he can live with her at the bottom of the river. After living with the Siren for some time, the Lakandon wants to know why she keeps him down there. He is cold and does not like living like a fish-man:

(5.45)a *b'a7 u-b'ehr ma7 u-p'aht-er ik-muuk-ir*  
what 3SG.A-road NEG1 3SG.A-stay-PLN.IV 1PL.A-great-POSS

*ma7 w-ir-ej-Ø siis*

NEG1 2SG.A-see-DEP-3SG.B cold

'Why did the ancient not stay? Because it was cold'

b *mana7 k'iin*

NEG.EXIST sun

'There was no sun'

c *cheen a-u-wihnkir-ir a-ja7 ixtahnyohraj-o7 na7 ti7 ja7*  
only DET-3SG.A-person-POSS DET-water PN-TD.DIST house PREP water  
'Only the woman of the water, "ixtahnyohra" (the Siren) had her house in the water'

d *na7 ti7*

house PREP

'(she had) her house there'

e *mana7 k'ahk' mana7 ti7 yaan*

NEG.EXIST fire NEG.EXIST PREP EXIST

'there was no fire, there was nothing there'

f ma7 w-ir-aj-Ø                      a-kuhch-o7  
 NEG1 2SG.A-see-CP-3SG.B    DET-before.INCL-TD.DIST

k-u-tuk-r-ik-Ø-e7                      yaan    k'ahk'  
 INC-3SG.A-think-TR-PLN-3SG.B-TD.ANA EXIST    fire  
 'Of course, he remembered that he used to have fire'  
 [HB050228\_1KYYM\_4]

The state marked with *7akuhcho7* is not necessarily something that the speaker expects the addressee to be familiar with, but rather something everyone knows, i.e. that humans use fire to cook. It is present within the storyline itself and makes reference to something the man remembers before he was abducted by the Siren. It is an example of a transposed use of *kuhch*.

An illustration of the indexical shift that is hypothesised to exist between *7uhch* and *ka7chik* can be viewed in a comparison between instantiations of both markers. The examples are repeated from the introduction (section 1.2). The first example comes from a conversation between EChK and a visiting non-relative. Here EChK tries to clarify to the visitor what he has said on a previous occasion regarding a rather complicated situation of a broken water pipeline:

(5.46) ma7 7inw-a7r-aj-Ø            raji7    [ka7]    yäx    juhntaj    7uhch  
 NEG1 1SG.A-say-CP-3SG.B    3SG.IND [SUB]    first    meeting(Sp.) before.EXCL  
 'I didn't say that at the last meeting.'  
 [HB041023\_1EChK\_7]

By using *7uhch*, EChK states his personal perspective of what he said at the meeting in question. In addition, the stance adopted by EChK is in contradiction to what the visiting man has suggested at the beginning of the conversation (cf. section 5.3.3.3).

A different perspective is seen in an explanatory narrative where EChK this time is telling the author what he knows about the Lakandones' interpretations of dreams. The traditional practices of interpreting dreams have largely been abandoned, but many still have some knowledge of what certain dream-symbols represent in the waking hours of a person. Present is also EChK's son KY, and when EChK loses his line of thought and hesitates on what to tell me next, he asks his son to help him by restating what he has mentioned a only while ago:

- (5.47)a *b'ay t-aw-a7r-aj-Ø* *ka7chik*  
 what COM-2SG.A-say-CP-3SG.B before.INCL  
 'What did you say before?'
- b *chäkäw*  
 warmth  
 'Fever'
- c *7a-ma7 chäkäw b'a7ykin t-aw-a7r-aj-Ø* *ka7chik*  
 DET-NEG1 warmth which COM-2SG.A-say-CP-3SG-B before.INCL  
 'Fever wasn't what you said'
- d *k'uxu7*  
 anatto  
 'Achiote'
- e *a-k'uxu7 laj-e7 [...]*  
 DET-anatto ND-TD.ANA  
 'Achiote, that's it (what you said)'
- [HB040905\_2EChK\_7]

In (5.47a) EChK requests a repetition of information that the addressee has already uttered. However, the perspective of the speaker is still present since EChK disqualifies the response he gets by disagreeing with his son and asking for another utterance to be repeated. By keeping *ka7chik*, EChK maintains an emphasis on what the addressee knows, and what he has already told the speaker. Still, *the beliefs of the speaker* are central throughout the exchange in (5.47).

The use of *ka7chik/kuhch* in questions does not result in a reversal of perspective with regard to the knowledge of the speech participants, similar to what we saw with *b'aje7*. Since both *ka7chik* and *kuhch* mark knowledge symmetry, there is no reversal to be made.

If *7uhch*, on the other hand, replaces *ka7chik* in (5.47) the statement would indicate that the speaker had not heard what the addressee uttered a while ago. In (5.47) as it stands, this is not the case: EChK knows what expression he heard KY say although he cannot think of it straight away. It has a remind function directed both to KY and to himself.

### 5.3.2.3 Hypothetical

Consistent with the semantics of *ka7chik/kuhch* that we have explored so far, is that both expressions also have a use in hypothetical constructions of the kind: “if only you hadn’t told him, then he would never have known”.

- (5.48) *a-wa ma7 u-chuj-ik-Ø kuhch-o7*  
 DET-COND NEG1 3SG.A-burn-PLN-3SG.B before.INCL-TD.DIST  
*ma7 [u-ma7] u-cheen=ruksen-ak t-u-maam*  
 NEG1 [3SG.A-NEG1] 3SG.A-only=bother-DEP.IV PREP-3SG.A-H  
 ‘If he hadn’t burned her, he (the owl) wouldn’t have come to bother her husband’  
 [060923 MChKY]

A hypothetical/unrealised use of *kuhch* is done in combination with either the negative particle *ma7* (5.48), or the indefinite *b’in* *ERG-ka7* phrase (5.49). It signals, as it always does, *known (factive) information*, regardless of whether it is referred to in a hypothetical construction which is achieved by combining *kuhch* with *wa(h)*, the hypothetical ‘if’ marker.

- (5.49) *ka7chik in-b’in in-jur-ej-Ø*  
 before.INCL 1SG.A-FUT2 1SG.A-hunt-DEP-3SG.B  
 ‘I was going to go hunting (but I didn’t go)’  
 [060911 EChK]

The hypothetical construction in (5.48) and the unrealised (irrealis) one in (5.49) refer primarily to known facts, i.e. information that is presupposed in some sense and which is then questioned or cancelled. The cancellation is made possible from the non-temporal semantics found in *ka7chik/kuhch*.

The use of *ka7ch(ik)/kuhch* in expressions such as the ones seen in (5.48) and (5.49) remains with a signalling of a socio-centric perspective with regard to a past event, and its semantics are not primarily grounded in unrealised events. This is clearly seen from the fact that a speaker can use *7uhch* in place of *kuhch* and not lose the hypothetical function of the phrase. Compare (5.50) to (5.51), below:

(5.50) *wa ma7 u-ch'uk-t-a7b' tehn u-maam kuhch*  
 COND NEG1 3SG.A-spy-TR-CPASS by 3SG.A-H before.INCL  
 'If only her husband hadn't spied on her' (which he in fact did, as you know)

(5.51) *wa ma7 u-ch'uk-t-a7b' tehn u-maam 7uhch*  
 COND NEG1 3SG.A-spy-TR-CPASS by 3SG.A-H before.EXCL  
 'If her husband hadn't spied on her before' (I am telling you he did)  
 [060923 MChKY]

The difference between (5.50) and (5.51) does not lie in the presence or absence of a hypothetical meaning but can only be understood in terms of the knowledge asymmetries discussed above.

I anticipate that the critical reader may be suspicious of the analysis presented so far. Perhaps the case I have made appears unconvincing and the interpretations arbitrary. If this is indeed the case, I wish to take a pause before continuing to investigate other time expressions and include in the discussion other kinds of evidence that I have collected on how the already introduced time words are interpreted and used by speakers of Lakandon Maya.

### 5.3.3 Comparing the semantics of past time reference markers

In the investigation of time words in Lakandon Maya, I have used several strategies to check the hypothesis that I have formed from observing the use and distribution of the relevant words in recorded and analysed speech.

In this section I will present some evidence that I have gathered regarding the inherent and conveyed meaning of *7uhch*, *kuhch*, and *ka7chik*, in addition to what I have been able to observe regarding their use and distribution in texts based on recordings of analysed Lakandon speech.

#### 5.3.3.1 *7uhch* and *kuhch*

The initial hypothesis, that I have continued to entertain, is that *7uhch* and *ka7chik/kuhch* are used to signal a *knowledge (a)symmetry* between the speech participants with regard to past eventualities. Since both words are only used to make reference to "past" events and states, they should be considered as time words, which is how the corresponding forms are described in the related languages Yukatek and Itzaj (cf. Hanks 1990, Hofling 2000). As stated, a temporal definition is however not enough



to explain their use and distribution, which is why a closer investigation of their meaning is undertaken.

De-contextualised translations of both words result in an identical corresponding expression in Spanish, namely ‘antes’ (Eng. ‘before’, ‘previously’, ‘ago’). However, in translating transcribed speech, both words are also sometimes left without a translation. In (5.52) both expressions are once again exemplified with translations:

(5.52)a *b'in-een ich laakanja7 kuhch*  
 go.CP-1SG.B LOC TN before.INCL  
 ‘I went to Lacanjá some time ago’

b *b'in-een ich laakanja7 7uhch*  
 go.CP-1SG.B LOC TN before.EXCL  
 ‘I went to Lacanjá some time ago’  
 [060915 MChKY]

A grammatical difference is detected if both expressions are placed as adverbial auxiliaries (i.e. AM-markers) fronting the verb phrase. In this position, only *7uhch* is accepted revealing a syntactic difference:

(5.53)a *7uhch b'in-een ich laakanja7*  
 before.EXCL go.CP-1SG.A LOC TN  
 ‘It was some time ago that I went to Lacanjá’

b *\*kuhch b'in-een ich laakanja7*  
 before.INCL go.CP-1SG.A LOC TN  
 [060915 MChKY]

I also had the speakers provide me with examples of how they used the words in question. Although the semantic parameters that emerged were pragmatically conditioned, as I had expected, the terminology used to discuss and describe them was anchored in a temporal perspective: *kuhch*, which is hypothesised to indicate a *knowledge symmetry* between the speaker and the addressee, is described as being more closely situated in time compared to *7uhch*, which indicates an *asymmetry of knowledge* where the speaker assumes personal knowledge of some eventuality. This temporal

contrast is however not reflected in the examples found in recorded speech where the temporal distance of *kuhch* is inconsequential (exx 5.40 and 5.44 repeated):

+20 years ago:

(5.40)c *ti7 yaan-een.o7b' ich mehjiko yejer in-yuhm peepe*  
 PREP EXIST-1PL.EXCL.B LOC TN with 1SG.A-FB PN  
 'We were in Mexico with my uncle Pepe'

d *in-yuhm cheen b'in u-ka7*  
 1SG.A-FB only go.CP  
 'Only my uncle was going to go'

e *ich este chiwahwa kuhch*  
 LOC this(Sp.) TN before.INCL  
 'to Chihuahua (as you already know)'

[HB050328\_1KYYM\_1]

a few days ago :

(5.44) *t-inw-a7r-aj-Ø tee ch kuhch-e7 ja7wän*  
 COM-1SG.A-say-CP-3SG.B 2SG.IND before.INCL-TD-ANA BrW

*ma7 a-tak-ik-Ø in-jo7 ti7 in-maam*  
 NEG1 2SG.A-hit-PLN-3SG.B 1SG.A-head PREP 1SG.A-H  
 'I told you previously, sister-in-law, not to tell on me to my husband!'

[HB050728\_AChKYK\_1]

In the process of checking the status of both *7uhch* and *kuhch* as proper time words, I also investigated the possibility of using them to answer when-questions. From that test, it is apparent that *kuhch* cannot be used to indicate the anterior occurrence of some event-state. Only *7uhch* can do that.

For example, if I ask *b'ehr tab'eetaj ajaarar* – 'When did you make your arrows?', a reply like, *tinb'eetaj kuhch* – 'I made them some time ago', is not a permissible answer. It is not an ungrammatical construction using *kuhch* in this context, but in doing so one fails to specify anything concerning the temporal context when the arrows were made. One speaker commented on this by saying that *kuhch* as an answer did not go well with the question. *7uhch*, on the other hand, is an appropriate answer to the question.

A better context, in which you could answer the person, using *kuhch*, is if he comes asking you if he can buy e.g. your arrows. Then you can say that you had some,

and that you have made them, but that they are gone now. The phrase that MChKY offered in response to this scenario is seen in example (5.54):

- (5.54) *yaan kuhch t-in-b'eet-aj-Ø kuhch xu7p-ir*  
 EXIST before.INCL COM-1SG.A-make-CP-3SG.B before.INCL run.out-NOM  
 'There were (arrows), I made them, (but now) they are gone.'  
 [060915 MChKY]

You cannot answer a when-question with *kuhch* because the question implies that you answer it with a time word that designates a time when something occurred. That is not in the meaning of *kuhch* and it is also why MChKY gives me an example where a person comes to say, as if he *expected* you to have arrows: 'Can I buy some arrows?'. In such a situation, you can use *kuhch* to mean that you had them as your friend expected, but that they are gone.

*kuhch* encodes two features of meaning: *anteriority* (i.e. a contrast to the present), and information that is deemed *accessible to the addressee*. Despite its anterior meaning, *kuhch* cannot answer when-questions with regard to some previous time, only *7uhch* can do that.

Another example that illustrates the same point was provided by MChKY in (5.55). It is a hypothetical answer to the question: 'does he still have a car?', that requires the addressee (as the one posing the question) to have knowledge about the information that the speaker supplies with regard to the here-mentioned car:

- (5.55) *kaj inw-ir-aj-Ø yaan u-yaaka7=ru7m kuhch*  
 when 1SG.A-see-CP-3SG.B EXIST 3SG.A-run=ground before.INCL  
 'When I saw him he had a car (it may not be the case now)'  
 [060915 MChKY]

The case of *kuhch* serves to illustrate the frequent observation that translations may be misleading. The translation in this case points out one aspect of the meaning of *kuhch*, namely anteriority, but it fails to specify the indexical ground that concerns the knowledge asymmetries between the speech participants. Although temporality as a semantic parameter is clearly present in the translation of *kuhch*, it features other important semantic parameters that must be emphasised in its definition before its use and meaning can be fully accounted for.

### 5.3.3.2 *kuhch* and *ka7chik*

My preliminary hypothesis was that *kuhch* and *ka7chik* had the same meaning and function, but that they belonged to the southern and the northern dialect of Lakandon, respectively. In the investigated samples of analysed natural speech I have found no examples of *kuhch* in Northern Lakandon (NL) and no examples of *ka7ch(ik)* in Southern Lakandon (SL).

In the process of checking my hypotheses regarding the use and meaning of time words in both dialects, I elicited examples of *kuhch* and *ka7ch(ik)* from speakers of both dialects. Somewhat to my surprise, a speaker of NL gave me examples of *kuhch*, and a speaker of SL gave me examples of *ka7ch*. However, at least in the case of the SL speaker, the translation of the examples provided, differed both with regard to use and meaning.

The parameters for determining the grammatical status and meaning of *ka7ch(ik)* in NL vs. SL, are the following: 1) *lexical form*, 2) *syntax*, 3) *semantic cancellation*, and 4) *exemplified use and meaning*.

The first parameter, *lexical form*, is easily determined. NL has *ka7chik* and SL has *ka7ch*. It is not obvious what the *-ik* in NL consists of, but there is also the form *7uhch-ik* in that dialect, which carries the same suffix. It is probable that it expresses an “adverbial focus” as suggested by Hofling (2000:162) for Itzaj. This suffix is also found in Colonial Yucatek where adverbial focus constructions required a separate status paradigm (Yasugi 2005). These constructions, although not present in modern Yucatek except as archaic remnant forms, are reflected in the *-ik* suffix of *ka7ch-ik* and *7uhch-ik*. Secondly, the placement of *ka7ch(ik)* within the phrase differs to some degree between SL and NL. In NL, *ka7chik* can occupy the same positions as *7uhch(ik)* (see section 5.1), meaning that it can be placed neutrally in phrase final position (5.56a), or phrase initially in a focussed or topicalised construction (5.56b, see below).

In SL on the other hand, *ka7ch* can only be placed phrase-finally (5.56c). If it is placed at the head of the phrase it must be topicalised and thereby be placed outside of the actual phrase (5.56d-e). The syntactic consequences of topicalisation in Tzotzil are discussed by Aissen (1992) and in agreement with her arguments, topicalisation in Lakandon results in a separate phrase placed before the main phrase.

The evidence for this conclusion is on a syntactic level. The contrast can be seen in comparing (5.56b) with (5.56e). In the former, focussed construction, the phrase *k-in-b'in* is used to mean ‘I am going (to)’. This construction is only used when preceded by

some modifying element such as an AM-marker or a time adverbial. If nothing is placed before the construction, then *b'in in-ka7* ('I am going (to)') is used (see also section 5.4.1.2).

Given that the *b'in inka7* construction is indeed used in (5.56e), we may conclude that the preceding element, *7aka7cho7* is syntactically outside of the phrase giving us two distinct but connected phrases.

- (5.56)a NL *b'in-een ich paleenke ka7chik*  
 go.CP-1SG.B LOC TN before.INCL  
 'I went to Palenque a while ago'
- b NL *ka7chik k-in-b'in in-jur-ej-Ø*  
 before.INCL INC-1SG.A-FUT2 1SG.A-hunt-DEP-3SG.B  
 'I was going to go hunting'
- c SL *b'in-een ich laakanja ka7ch*  
 go.CP-1SG.B LOC TN before.INCL  
 'I went to Lacanja a while ago'
- d SL *\*\*ka7ch in-b'in*  
 before.INCL 1SG.A-go
- e SL *a-ka7ch-o7 b'in in-ka7-Ø*  
 DET-before.INCL-TD.DIST FUT2 1SG.A-do-3SG.B  
 'Before, I was going to go (but I didn't go)'

[Field Notes 2006, exx. a-b EChK; exx. c-e MChKY]

What remains in order to define the function and meaning of *ka7ch(ik)* in both SL and NL, is determining the semantics of the form. The third parameter, cancellation, is present in both dialects. An example from NL is given in (5.57):

- (5.57) NL *ka7chik b'in-een pero ma7 b'in-een*  
 before.INCL go.CP-1SG.B but(Sp.) NEG1 go.CP-1SG.B  
 'I was going to go but I didn't go'

[060911 EChK]

A similar, necessarily topicalised, construction in SL, however, does not yield an immediately cancellable meaning:

(5.58) SL *a-ka7ch-o7* *b'in-een* *in-xihmb'ar*  
 DET-before.INCL-TD.DIST go.CP-1SG.B 1SG.A-walking  
 'A while ago I went walking'  
 [060918 MChKY]

If the future-cum-motion construction *b'in inka7* from (5.56e) is used (repeated here), the hypothetical meaning is available for the translation of the phrase, and the same is true for NL (5.56b repeated):

(5.56)e SL *a-ka7ch-o7* *b'in in-ka7*  
 DET-before.INCL-TD.DIST FUT2 1SG.A-do  
 'Before, I was going to go (but I didn't go)'  
 [060918 MChKY]

(5.56)b NL *ka7chik* *k-in-b'in* *in-jur-ej-Ø*  
 before.INCL INC-1SG.A-FUT2 1SG.A-hunt-DEP-3SG.B  
 'I was going to go hunting (but I didn't go)'  
 [060911 EChK]

Semantic cancellation of a temporal expression means that it is a non-tense-like expression that although it makes reference to a past event, fails to temporally anchor the event on the time-line. A hypothetical meaning is available, suggesting a modal-like character for *ka7ch(ik)*. The difference in meaning between *ka7ch(ik)* in NL and SL is further exemplified in meta-linguistic discussions about meaning and contexts where *ka7ch(ik)* would be appropriately used.

MChKY, who is a speaker of SL, gave me several indications of the most salient parameters of *ka7ch* in that dialect. Example (5.56c) was for example translated in a way that specified the temporal perspective for its use (repeated here):

(5.56)c *b'in-een* *ich* *laakanja7* *ka7ch*  
 go.CP-1SG.B LOC TN before.INCL  
 'I went to Lacanjá a while ago (on the same day)'  
 [060918 MChKY]

According to MChKY, the anterior meaning of *ka7ch* means that you have to be somewhere else than the place you refer to in uttering (5.56c). MChKY told me that if you say, *k'ucheen ich San Cristóbal ka7ch*, meaning 'I arrived in San Cristóbal a while ago', while you still are in San Cristóbal, then that sounds wrong since you would have

to be somewhere else if you want to use *ka7ch*. This is a feature that is also shared by *kuhch*. If you use the same sentence (*k'ucheen ich San Cristóbal ka7ch*) but exchange *ka7ch* for *kuhch*, then that also means that you are no longer in San Cristóbal.

MChKY also specified that you only can use *ka7ch* if you did something or had been somewhere on the same day. He contrasted its use with *kuhch*, which would indicate that you did something a while ago, like a week or more. Consequently, if you utter a phrase like *k'ucheen ich San Cristóbal ka7ch*, you would have to be somewhere nearby like Ocosingo or Comitán because of the temporally proximal meaning.

When discussing the meaning of *ka7chik* in NL, the issue of temporal distance was not present in the same way. When EChK was faced with a choice of marking a sentence like *b'ineen ich Palenque*, meaning 'I went to Palenque', with either *ka7chik* or *7uhch(ik)*, he translated the use of *ka7chik* as, 'evidently I am there, I am always in Palenque'. The same phrase with *7uhchik* was translated as 'Some time ago I went to Palenque, I am not there often, but I used to be'.

Another scenario that contained a choice between *ka7chik* and *7uhch(ik)* gave another comment from EChK. For the phrase, *tintukraj sa7teen ich k'ahx ka7chik*, meaning 'I thought I was lost in the forest', he included the phrase 'you already know that...' in the discussion of the meaning of *ka7chik*. In this context, however, he also mentioned that the event 'did not take place a long time ago' in contrast to *7uhchik*, which in the same context would mean that the event happened a long time ago. The same meta-discussion that was encountered in NL as it was in SL, i.e. that knowledge asymmetries are discussed using time word-terminology. Temporal distance is used metaphorically to refer to the knowledge access of the speech participants.

The reverse situation, where the meaning of *kuhch* was discussed with a speaker of NL yielded less information about its use and meaning. The speaker EChK indicated that he did not use *kuhch* although he claimed to know what it meant. An example of *kuhch* in (5.59) demonstrates two things: its placement in a focussed, non-topicalised position, indicates that its distribution is equated with *ka7chik* in NL, and the translation shows that non-temporal parameters are salient to its meaning.

- (5.59) *kuhch in-b'in*  
           before.INCL 1SG.A-go  
           'I went to a familiar place'  
       [060911 EChK]

To a speaker of NL, *kuhch* refers to something known and familiar to both speech participants. In the absence of examples provided me by EChK regarding *kuhch*, I read an extract from story told by a speaker of SL about the river-dwelling Siren who abducts a Lakandon man, and how the man sits at the bottom of the river pondering that he “used to have fire” before he was taken away. The example reads *yaan k’ahk’ kuhch* (‘there used to be fire’) and EChK said he recognised the construction and compared it to the example in (5.59).

When I read him the example in (5.44) above, EChK repeated it but (unknowingly?) changed the *kuhch* to *tok*, a particle also relevant to the marking of knowledge symmetry (see section 5.2.2): *inwa7raj teeche kuhche7* (‘I told you (before)’), became *kin-tok-a7raj teeche* (‘I told you’). The indexical symmetry feature found in *tok* is discussed in detail in section 5.2.3. Its appearance in the discussion of *kuhch* supports the hypothesis held with regard to both particles.

#### 5.3.3.3 Summary and discussion of the proposed analysis

More will be said about the evidence used to argue for the proposed interpretation regarding the use and meaning of *7uhch*, *kuhch*, and *ka7chik* in chapter 6, where the results of the investigation are brought together and analysed from different angles. In concluding the discussion so far, I wish to draw the reader’s attention to the difference between the distribution of the above expressions in texts as opposed to the discussion of the meaning and use of the same expressions.

Although speakers of SL are able to use *ka7ch* in example sentences during elicitation and provide a consistent translation for the expression, it is unattested in samples of analysed, natural speech. This fact could be interpreted in several ways: 1) the form could be archaic and slipping out of use, 2) the language corpus could be biased and fail to provide examples of *ka7ch* because of its composition, or 3) it could be a consequence of the linguistic interaction between speakers of NL and SL in the community of Lacanjá (see section 2.3.1) where speakers of both dialects are aware of the way others use certain lexical forms.

The elicited presence of *ka7ch* in SL can be attributed to a combination of all three listed reasons. The distribution and attested use of *ka7ch(ik)* and *kuhch* in analysed texts is almost identical, something that suggests that although *ka7ch* is attested by speakers of SL, its use and meaning is separate from the same form in NL. A possibility



that will be discussed in chapter 6 is that at least part of the function that was attested for Colonial Yukatek has been preserved in SL with regard to the presence of both *ka7ch* and *kuhch* (see section 6.2.2). This analysis does not change the analysis presented here but must be considered for a more complete understanding of the meaning and function of both forms.

In closing, I would like to include a final example that illustrates all four attested forms for NL in one stretch of discourse, namely, *b'aje7*, *tok*, *7uhch*, and *ka7chik*. The situation is one where EChK is talking to another Lakandon speaker, JChKYY, about the problem with the water pipeline, a conversation that was exemplified previously in chapter 1 (ex 1.1; also section 5.3.2.2). At the time of the conversation, EChK had the role of “commissioner” (Sp. ‘comisariado’), which means that persons with grievances came to EChK to complain about things that pertained to the greater community. Extracts from the conversation follows:

- (5.60)a *k-u-taar*                      *uhch-o7*                      *k'aj*      *teech*  
 INC-3SG.A-come    before.EXCL-TD.DIST    remember 2SG.IND  
 ‘It (i.e. the water) used to come, do you remember?’
- u-b'aj-ir*                      *k-u-tuhr-ur*                      *mix*    *k-u-xu7p-ur*  
 3SG.A-REFL-NOM INC-3SG.A-fill.up-PLN.IV NEG2 INC-3SG.A-run.out-PLN.IV  
 ‘It filled up by itself and didn’t run out.’
- b *pero*      *k-in-tok=7a7(r)-ik-Ø*                      *b'eh*    *k'iin[...]*  
 but(Sp.)    INC-1SG.A-just=say-PLN-3SG.B    when    sun  
 ‘but I’ll let you know when [...]’
- c *b'aytak*    *u-läk=tzaj-ar*                      *u-liinya*                      *b'aje7*                      *tuhn-o7*  
 close      3SG.A-all=dry-PLN.IV    3SG.A-pipe.line(Sp.)    now.EXCL    then-TD.DIST  
 ‘Soon the line is going to dry up completely.’
- d *in-cheen=a7r-a7*                      *ka7chik*      *yaan*      *b'in*    *inw-ir-ej-Ø*  
 1SG.A-only=say-CPASS    before.INCL    EXIST    FUT1    1SG.A-see-DEP-3SG.B
- b'a7*    *u-b'ehr*  
 what    3SG.A-road  
 ‘I was told that I have to go find out why (there is no water).’
- e *bueno*    *a-tahr*                      *ma7*    *u-tok=sa7p'är*  
 well(Sp.)    DET-SP.R.DIST    NEG1    3SG.A-just=dry.up-PLN.IV  
 ‘Well, over there it doesn’t dry up’

[HB041023\_1EChK\_7]

The examples in (5.60) are discontinuous extracts from different parts of the conversation. The different perspectives that they express serve as illustrations of the analysis proposed here.

In (5.60a) which is early on in the conversation, JChKYY refers to a state that may be familiar to EChK, but which does not have to be, since they live in separate parts of Lacanjá. The water runs in some parts of the community, but not in others. He introduces the background to the current state of affairs, not by assuming that EChK knows what has been going on, but by informing him of his personal knowledge of the situation.

In (5.60b), on the other hand, *tok* refers to something that has already been stated. JChKYY says he will let EChK know when something is going to happen but *tok* does not refer to this future event. It refers to what JChKYY has already told EChK in the conversation, *not* regarding the future state of affairs. A second example where *tok* has a similar use is shown in (5.60e) where EChK is referring back to a state that has already been discussed in the conversation. It instantiates reference to shared information.

*b'aje7*, in (5.60c) refers to what JChKYY thinks is going to happen soon, based on what the water situation is like at the moment of utterance. It is an example of presenting personal knowledge and features a knowledge asymmetry where the speaker assumes the addressee's lack of knowledge. The temporal grounding of the event is taken care of by the metaphorical use of *b'aytak* 'close', indicating an imminent drying up of the water in the line.

In (5.60d), *ka7chik* makes reference back to the already stated reason for JChKYY coming to complain about the water supply to EChK. In this phrase, JChKYY excuses himself somewhat by repeating that he was asked to go see EChK and ask him about what was being done about the water situation. This is information that is available to both speech participants.

From a wider perspective including Yukatek, it appears that the notion of symmetry in making reference to places, objects, and events is a pervasive phenomenon. It can be found on a grammatical and lexical level depending on the kind of reference made. Vapnarsky (2000) discusses the use of terminal deictics (TDs) in temporal reference in Yukatek. Her proposed analysis places notions such as *shared-* and *individual knowledge*, *temporal proximity/distance*, and discourse grounded parameters including *new-* and *old information* with the use of the TDs *-a7*, and *-o7*

(ibid: 332-341). This is also in agreement with Hanks' analysis of the same suffixes although, as stated, his investigation largely excludes an analysis of time deictics. Vapnarsky's results are therefore unsurprising, but interesting with respect to the results presented here on Lakandon time deictics. The difference between Yukatek, as described by Vapnarsky, and Lakandon is that the instances of knowledge asymmetries found in Lakandon are lexicalised in the investigated expressions (i.e. *7uhch*, *kuhch/ka7ch(ik)*, *b'aje7*, and *tok*) whereas the TDs *-a7*, and *-o7* are generally available for *all* dimensions of reference and thus cannot be said to encode any one feature to the exclusion of, or in hierarchical relation to, the others. This means e.g. that the notion of shared knowledge and already introduced information are unseparable in the forms and can only be understood from the context where they are used. Consequently, the semantics of *-a7*, and *-o7* in time reference to denote temporally grounded participant asymmetries can only be viewed as an instance of *conveyed* meaning, unless it can be proven that the features of meaning explored by Vapnarsky with regard to *-a7*, and *-o7* exist on the *separate levels* regardless of the dimension where they occur. Such an analysis appears doubtful from the perspective of both Hanks' and Vapnarsky's analysis. From the present investigation it appears that although the TDs *-a7*, and *-o7* have important functions in reference generally (see section 4.4), this must be considered as separate from the function of the time words investigated for Lakandon, which in all appearances have encoded meaning relating exclusively to the temporal dimension. More on this topic is found in section 6.1.1, below.

#### **5.4 FUTURE: non-immediately accessible experience**

In Lakandon Maya, future time reference is not made using free-standing adverbs with a grammatical status that is comparable to *7uhch* or *kuhch*. In Lakandon, as in all Yukatekan languages, aspect-mood markers take care of this. In the available literature on Yukatek, reference to future events has been described in two ways: 1) with regard to the relative proximity of the future event to the moment of utterance, and 2) from a modal viewpoint that indicates the speaker's intention, or assurance, with regard to a future event.

In this section, the speaker- and event-dependent perspective is discussed together, the latter having been absent from previous sections. In future time reference, they are discussed alongside each other since the two perspectives are contrasted in a way that is immediately relevant to the description of expressions of futurity. This

comparison replaces the previous division by sections into communicative functions. Although communicative functions are relevant to the semantics of future reference, the choice was made to emphasise a discussion of the underlying motivations and the resulting semantics of the investigated forms.

Time reference to future, or non-immediate events, is discussed in light of the analysis presented for past and present time reference, above. It appears meaningful to follow the observations regarding the perspective of the participants in *all* forms belonging to the speaker-perspective. This despite the fact that such perspective is most clearly seen in the forms analysed above in sections 5.2 and 5.3. I assume that the features explored in those sections are discernible throughout the system for temporal reference although they may not be equally salient in all forms.

First, event-dependent future time reference is investigated in an exploration of the semantics of the expressions *b'ihn* and *b'in ERG<sup>32</sup>-ka7* (section 5.4.1). Thereafter, the speaker-dependent *je7...-ik(e7)* is investigated (5.4.2) with a following discussion, in which the two perspectives are compared.

#### 5.4.1 Expectation

The semantics of “future” constructions are investigated from a pragmatic perspective in a similar fashion to “past” reference strategies. The central concern of the present investigation is the motivations and contextual prerequisites for the use of certain constructions. It appears that future time reference is not tensed in that the available constructions can be used for reference to past events without any alteration to the forms. This use of forms is consistent with the previously made observation that Lakandon Maya is a tense-less language (section 4.1.3).

As indicated in the section directly above, there are two ways to make reference to a non-immediately accessible event: a modal, and a non-modal. We leave the modal marker for section 5.4.2. The non-modal future marker, *b'i(h)n*, which is glossed “indefinite future” (Bricker et al. 1998: 332), “prospective/predictive” (Bohnenmeyer 1998: 244), or “durative indefinite future” (Kaufman 1991: 162), is discussed directly below.

Bohnenmeyer excepted, I have to assume that the other authors' glosses are based on translation correspondences since no motivations for their glosses are mentioned or

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<sup>32</sup> Set A, or ergative marker

available; i.e. the Spanish future form, *ir a* ('go to') is mapped onto the Yukatekan *b'ihn*.

Kaufman (1991) lists 3 distinct constructions involving *b'i(h)n*. The first has *b'ihn* placed in front of an inflected, subordinate verb in the dependent status (Bohnenmeyer 1998: 'predictive'):

YUK

- (5.61) *b'ihn in-kan-e*  
 FUT1 1SG.A-learn-DEP  
 'I will learn it'  
 (Kaufman 1991: 162)

The second and third constructions have, according to Kaufman, a common origin in a construction involving an auxiliary verb *ka7j*, (perhaps) meaning 'to do' (Hofling 2000: 372). Its reflex in Itzaj (*b'el [setA-ka7aj]*) is glossed as "(immediate) future auxiliary" (Hofling 2000: 372)

- (5.62) \**b'in-el Erg-ka7j* Erg-VERB-incompletive(-Abs) 'immediate future'  
 (Kaufman 1991: 166)

In Yukatek, Itzaj, and Lakandon this "proto"-construction has resulted in a) an auxiliary formation that takes the dependent status for transitive verbs (5.63) and incompletive/plain status for intransitives (5.64), and b) a construction that appears to function as both a motion verb (5.65) and as a future marker (5.66).

- (5.63) *a-Juan-o7 b'in u-ka7 u-päk'-ej-Ø iik*  
 DET-PN-TD.DIST FUT2 3SG.A-do 3SG.A-sow-DEP-3SG.B chilli  
  
*a-teen-o7 ma7*  
 DET-1SG.IND-TD.DIST NEG1  
 'John is going to sow chilli, but I won't.'  
 [ALIM questionnaire MChKY: e-0808]

- (5.64) *b'in u-ka7(j) ween-an chichaan*  
 FUT2 3SG.A-do sleep-PLN.IV child  
 'The child is going to sleep.'  
 [ALIM questionnaire CChKYJr: e-0297]

(5.65) *a-tah yaan ich naj-o7*  
 DET-SP.R.EXCL EXIST LOC house-TD

*k-u-b'in u-jur-ej-Ø yoj b'äk' u-maam*  
 INC-3SG.A-go 3SG.A-hunt-DEP-3SG.B CL.food game 3SG.A-H

'There she was in the house, (while) her husband went to hunt for game.'

[HB050225\_1KYYM\_2]

(5.66)a *y-a7r-aj-Ø wa je7 a-tz'ee-(i)k-Ø teen*  
 3SG.A-say-CP-3SG.B Q ASSUR 2SG.A-give-PLN-3SG.B 1SG.IND

*a-ti7ar kij*  
 2SG.A-child QUOT

'He said; if you give me your child, he said'

b *ne nuuk aw-o(7)ch käy*  
 very big 2SG.A-CL.food fish

*k-in-b'in in-tz'aa-Ø-Ø teeçh*  
 INC-1SG.A-FUT2 1SG.A-give-DEP-3SG.B 2SG.IND

'I'll give you very big fish'

[HB040909\_1EChK\_6]

It was observed in the discussion of the grammatical features of *kuhch* and *ka7chik* (section 5.3.3.2), and it is also stated by Kaufman with regard to the origin of the second and third constructions, that *b'in* *ERG-ka7* and *k-ERG-b'in* are two versions of the same construction.

In Lakandon, the former is used phrase initially and the latter is used if it is preceded by a fronted adverbial or AM-marker. Two already cited examples from (5.56) are repeated here:

(5.56) b NL *ka7chik k-in-b'in in-jur-ej-Ø*  
 before.INCL INC-1SG.A-go 1SG.A-hunt-DEP-3SG.B  
 'I was going to go hunting'

e SL *a-ka7ch-o7 b'in in-ka7-Ø*  
 DET-before.INCL-TD.DIST FUT2 1SG.A-do-3SG.B  
 'Before, I was going to go (but I didn't go)'

[Field Notes 2006, ex b, EChK; ex e, MChKY]

To repeat what was said in section 5.3.3.2, the topicalised phrase in (5.56e) constitutes a separate phrase and is not to be regarded as a phrase initial modifier like the marker *ka7chik* in (5.56b).

There appears to be a contradiction to this observation in (5.65) above. There the construction that also is exemplified in (5.56b) is preceded by a topicalised phrase that works in that same way as the example in (5.56e). However, although it is included in the present section on future reference, the example in (5.65) is not an example of a future auxiliary construction but is simply an example of the motion verb use of *b'in*.

It therefore appears that only the future auxiliary function of *b'in* is restricted by the presence or absence of another auxiliary and that there is a very simple reason for this, namely that it is impossible to place two *free-standing* auxiliaries or AM markers after another in front of the main verb. The incomplete marker *k-* can be combined with a freestanding adverbial, but two adverbials of the latter kind cannot be placed together.

#### 5.4.1.1 *b'ihn*

“Indefinite future” as Kaufman glosses *b'ihn* for Yukatek, means that there is a low expectation from a pragmatic perspective on behalf of the speaker with regard to the realisation of some event. Low expectation can also be viewed in terms of the *non-agency of the speaker* in making an event happen and it is indeed in situations such as these where *b'ihn* is used. When there is no specified strategy for accomplishing something or when the realisation of an event is deemed uncertain, *b'ihn* is the preferred marker to qualify such an event.

Vapnarsky (1999) discusses *b'ihn* for Yukatek spoken in Quintana Roo in terms of “predication”, or divination. There, *b'ihn* is used to make reference to future events that are of a prophetic nature. A similar use of *b'ihn* has not been observed for Lakandon, perhaps because there is no tradition of prophecy reading or divination outside of the disappearing dream-interpretation practices that were mentioned briefly in section 5.3.2.

In the recording I have on dreaming interpretations, HB040905\_2EChK\_7, which is a discussion between EChK and his son KY, there is no formulaic use of *b'ihn*. In general, a dream is connected to the idea that the following day, or days, are conditioned by the representation that the dream carries. It is not verbalised in that something is “going to happen” but rather that “if you see a needle in your dream, then it is the day of

snakes; a snake bites you”. There is no indefinite-ness to this prediction; it is a factual relationship between a dream and what you should expect to follow as a consequence of it.

If we return briefly to *non-agency* of the speaker as a semantic feature in *b'ihn*, there is an example in a story told by KYYM. There he tells of how he and his brother came to live in San Cristóbal de las Casas as a consequence of their mother's premature death. KYYM's father left them in the care of Gertrude and Frans Blom at Na Bolom since he could not provide for them alone. He had to go find a new wife for himself and a stepmother for his two children. The use of *b'ihn* in this example features the non-agency of the speaker in the realisation of an event/action. The feeding of his children is neither specified, nor dependent on his own participation. The extract describes the circumstances of this new arrangement and the exchange that took place then:

- (5.67)a *je7r-o7 ka7 b'in-eeen.o7b' ich san.kristoob'al*  
 OST-TD.DIST when go.CP-1PL.EXCL.B LOC TN  
 'When we went to San Cristóbal (de las Casas)'

[...]

- b *in-teet in-p'ät-ik-Ø in-ti7ar yejer u-suku7n*  
 1SG.A-F 1SG.A-leave-PLN-3SG.B 1SG.A-child with 3SG.A-oBr  
 'My father (said to Gertrude): I leave my child and his brother (with you).'

- c *teech b'ihn jaan-s-ik-Ø*  
 2SG.IND FUT1 eat-CAUS-AF.DEP-3SG.B  
 'You will (have to) feed them.'

[...]

- d *a-wa a-k'aat je7 in-jaan-s-ik-Ø a-ti7ar-e7*  
 DET-COND 2SG.A-want ASSUR 1SG.A-eat-CAUS-PLN-3SG.B 2SG.A-child-TD.ANA

*kij ma7 yaan tukrik*  
 QUOT NEG1 EXIST think  
 '(Getrude answers): If you want (me to), I will feed your children, she said.  
 Don't worry about it.'

[HB050211\_1KYYM\_1]

The construction in (5.67c) is an agent focus construction which means that two changes have occurred in the verb phrase; firstly, the ergative person marker has been extracted and secondly, the dependent status marker which usually accompanies the



*b'ihn* marker has been substituted by the plain status marker. The workings of agent focus constructions in Lakandon Maya and its motivations are discussed in Bergqvist (forthcoming).

I have very few examples of *b'ihn* in my corpus. From the ones that I do have, a second example is taken from the same recording that is featured in (5.67) above. Both the indefiniteness and the non-agency of the speaker can be clearly seen from the context. The speaker KYYM finishes up the story by saying that the recording machine that he has in front of him can be relied on to accurately play back the story that he had just told me:

- (5.68)a *b'axik a-k'a7=us-e7 b'ik'iin wa7*  
 like.this DET-remember=?-TD.ANA whenever COND  
 'That's how it will remember (it) when...'
- b *kihm-een b'ik'iin a-b'axik b'ihn uy-a7-ak b'ik'iin*  
 die-1SG.B whenever DET-like.this FUT1 3SG.A-say-DEP whenever  
 '...I am dead. That's how it will be said, then...'
- [HB050211\_1KYYM\_1]

Future reference to an unknown time when the machine will be playing back the words of KYYM is made using *b'ihn*. Since the speaker imagines that this will happen after he himself is dead, his own part in bringing about this event is limited to having recorded the story; it is up to the machine to deliver it once he is gone.

One last example is an instance of what looks like a prophetic use of *b'ihn*. It can be seen in an extract from another recording with KYYM where God (i.e. *jachakyum*) tells an ancestor that because he will not bathe without clothes, he will suffer disadvantages compared to the shameless foreigners who like swimming without clothes.

- (5.69)a *ma7 jach b'in pihm-tar-e7x a-teech.e7x-o7*  
 NEG1 very FUT1 many-ASSUM-2PL.B DET-2PL.IND-TD.DIST
- ma7 b'in pin-tahr-e7x mix b'ik'iin*  
 NEG1 FUT1 many-ASSUM-2PL.B NEG1 whenever  
 'There will not be many of you guys, you will not be many, ever.'

b a-tz'uhr-o7                      kij        b'ihn    pihm-ak        tuhn kij  
 DET-foreigner-TD.DIST    QUOT    FUT1    many-DEP.IV    then    QUOT  
 'The foreigners, he said, they will be many, then, he said.'

[HB050211\_1KYYM\_4]

It is not possible to specify the future time when something is going to happen in a phrase that contains *b'ihn*. For example, you cannot say 'In four months time, you will be in Mexico City' using *b'ihn*. The specification of when something will happen excludes the use of *b'ihn*. This means that *b'ihn* cannot be used to answer a when-question. It fails to specify a time for the occurrence of an event and instead features indefiniteness and non-involvement by the speaker. This (non-)feature is illustrated by the co-occurrence of *b'ihn* with *b'ik'iin* ('sometime', 'ever') which is a particle denoting an unspecified, unknown time (5.69).

#### 5.4.1.2 *b'in* ERG-ka7 and *k-ERG-b'in*

One semantic feature (and corresponding pragmatic motivation) that is present in *b'ihn* can also be found in the two other future constructions involving *b'in* that were introduced in 5.4.1 above, namely *the speaker's non-agency*. The indefiniteness, or non-specificity, is however reserved for *b'ihn*. The two latter constructions using *b'in* can be used to specify a time when some event will take place. This is seen in example (5.72) below, where *b'in* ERG-ka7 is combined with *sahman* ('tomorrow') to specify the time of an action.

The semantic feature of non-agency on the part of the speaker is connected to another feature that also can be discerned in (5.69) above. It serves to ground the act of reference in a second event that stands in a *cause-effect relation* to the event that is marked with *b'in* ERG-ka7 or *k-ERG-b'in*. Both constructions mark future events that are related directly to some other event as a matter of consequence or cause, i.e. without any modal meaning connected to the proposition. The cause-effect relation overshadows the speaker's non-agency but the two concepts are intimately connected because the dependency on another event implicitly excludes an emphasis on the speaker's role in the realisation of the event.

For example, in example (5.66) (see section 5.4.1, above) which is translated as: 'If you give me your child, I will give you (plenty of) big fish', the second part of the utterance: 'I will give you (plenty of) big fish', is constructed using *b'in* ERG-ka7 since it is a consequence of the first half of the utterance.

The level of expectation with regard to the realisation of an event is much higher in the two constructions using *b'in* than can be demonstrated for *b'ihn*. A high degree of expectation can of course be translated in terms of *immediacy*, but this notion obscures the difference between the two expressions since “non-immediate” is a poor concept to describe *b'ihn* for the simple reason that it is unspecified for temporal placement.

In (5.70) below, KYYM tells the story of a man-made monster made from palm leaves. The monster walks backwards and kills everybody in his way by infecting them with illnesses. The man who made the monster decides to kill, or untie it, for this reason.

(5.70)a *ma7 tzooy b'a7 k-a-b'eet-ik-Ø*  
 NEG1 good thing INC-2SG.A-do-PLN-3SG.B  
 ‘What you are doing is not good’

b *a-b'ahy-w-o7 kij*  
 DET-thus-RSLT-TD QUOT  
 ‘Now, therefore, he said’

c *ma7 in-b'in in-cha7-aj-Ø mahn [...] a-b'ahy-w-o7*  
 NEG1 1SG.A-FUT2 1SG.A-allow-DEP-3SG.B pass DET-thus-RSLT-TD  
 ‘I will not let you pass, because of this (now)’

[HB050228\_1KYYM\_1]

Because *b'in* marks a consequence of some other event or state, it often co-occurs with the resultative particle *we7*, which is present in the extract above in the form *b'ahywo7* (for a discussion on *we7*, see section 5.5). Even though the speaker is present in the situation as an agent, it is not emphasised semantically. The reason for using the construction is because there is a cause for the following, or “future” event-action-state.

The phrase in (5.65) above, *b'in uka7 weenan chichaan* (‘the child is going to sleep’), is another example of an event that excludes the speaker’s participation and/or control over the event. That ‘the child is going to sleep’, is not some event that needs to be asserted by the speaker if it means that the child is tired and therefore is going to sleep.

The pragmatic conditions present to motivate the use of *b'in* in (5.64) indicate that the event is out of the speaker’s control. Making a child sleep, on the other hand, by whatever means (lullaby, food, etc.) may or may not be marked with *b'in*, depending on whether the speaker wishes to emphasise his own agency in making the child go to

sleep, or not. If he does, then the agency of the speaker can be indicated by using *je7...(ik)e7*.

The above argumentation is a little premature given that the use of *b'in* is contrasted with that of *je7...-ik(-e7)*, which has not been presented yet, and is treated below in 5.4.2.

Another example illustrating the (non-)role of the speaker as an agent of future events can be seen in sentence e-0500 of the ALIM questionnaire<sup>33</sup>, where *b'in* is used to mark a non-immediately accessible event. The speaker's evaluation of the event that he is free from affecting the outcome of warrants the use of *b'in*:

- (5.71) *a-ray che7-o7 b'in u-ka7 ruh'b'-ur tahb'ar*  
 DET-NOM tree-TD.DIST FUT2 3SG.A-go fall-PL.IV soon  
 'This tree is going to fall very soon.'  
 [ALIM questionnaire MChKY: e-0500]

Because of the presence of agentless-ness in *b'in* with regard to the speaker, *b'in* is used to mark the intentions and future doings of others, i.e. third parties. This has already been suggested with regard to example (5.64) above, and in (5.72) below, the intention of someone else is present:

- (5.72) *Juan b'in u-ka7 u-kohch-kin-t-ej-Ø naj*  
 PN FUT2 3SG.A-go 3SG.A-wide-CAUS-TR-DEP-3SG.B house  
 'John is going to make his house bigger'.  
 [ALIM questionnaire MChKY: e-0529]

A contrast between the intention/agency of the speaker and a third party, is displayed in (5.73) where both *b'in* and *je7...-ik(-e7)* are present in the same sentence.

- (5.73) *a-Juan-o7 ma7 u-b'in u-päk'-ej-Ø*  
 DET-PN-TD.DIST NEG1 3SG.A-go 3SG.A-sow-DEP-3SG.B  
  
*a-teen-o7 je7 in-pä7k'-(ik)-Ø-e7*  
 DET-1SG.IND-TD.DIST ASSUR 1SG.A-sow-PLN-3SG.B-TD.ANA  
 'John is not going to sow, but I will'  
 [ALIM questionnaire MChKY: e-0809]

<sup>33</sup> ALIM stands for 'Archivo de Lenguas Indígenas de México', which is a publication consisting of several volumes published by the Colegio de México in Mexico City to supply basic grammatical information on indigenous Mexican languages.

The distinction between the speaker's and someone else's intentions is however not the deciding factor in using *b'in* when an event or action depends on *the speaker* to be realised. Depending on what the speaker wishes to emphasise, either *b'in* or *je7...e7* can be used.

What the choice between *b'in* and *je7* rests on is the speaker's evaluation of the degree of relevance the action has for the addressee. Consequently the speaker can choose to use the "assurative future" depending on the role of the addressee in the speech situation.

In examples (5.75) and (5.76), the answers to the question posed in (5.74) are formed using both *b'in* and *je7...e7* by different speakers.

(5.74) Q: *b'iktahb'ar*    *k-a-b'in*                      *a-ch'a7-ej-Ø*                      *che7*  
                  how                      INC-2SG.A-FUT2    2SG.A-carry-DEP-3SG.B    wood

*a-je7r-a7*

DET-OST-TD.PROX

'How are you going to transport the firewood?'

[ALIM questionnaire CChKYJr: e-0610]

(5.75) A1: *b'ihn*    *in-ch'a7-ej-Ø*                      *yejer chan tzimin*  
                  FUT1    1SG.A-carry-DEP-3SG.B    with    small horse  
                  'I am going to carry it on a mule'

[ALIM questionnaire CChKYJr: e-0611]

(5.76) A2: *je7*    *in-ch'ä-ik-Ø*                      *yeter*    *u-chan*    *tzimin(-e7)*  
                  ASSUR    1SG.A-carry-PLN-3SG.B    with    3SG.A-small horse(-TD.ANA)  
                  'I am going to carry it on a mule'

[ALIM questionnaire EChK, KY: e-0611]

Since the examples are from a questionnaire it is difficult to pinpoint the factors that make one speaker choose *je7* while the other uses *b'ihn*. I can only comment on this choice using my own understanding of how Lakandon speakers could be expected to respond to the rather artificial situation of carrying firewood with a mule, of which there are none in any Lakandon community. It is also interesting to note that the question, as it is formulated, does not ask for a *time* when the firewood will be transported, but only asks for the *manner* in which it is going to be transported.

EChK (A2) chooses to assert his intentions of carrying the firewood on a mule since that is something very unexpected for a Lakandon to say given the absence of

mules in their community. The choice of *je7...-ik(-e7)* also emphasises his own agency in the endeavour.

CChKYJr (A1), on the other hand, chooses the indefinite future marker to indicate a vague expectation with regard to this strange mode of transportation. He may be also be assuming a transportation *away from the addressee* since he is replying to a question posed to him by the hypothetical addressee about the transportation of firewood, which says nothing about bringing the firewood back to the house or towards the place of the addressee, thus making the proposition less relevant to the addressee.

This pragmatic consideration was tested with a speaker with regard to the co-occurrence between the direction inherent in certain motion verbs and the use of *b'in* or *je7*. The prediction was that if the speaker says that 'he will come/return/arrive/' to the place where the addressee is situated, then *je7..e7* is preferred. If the speaker is moving away from the addressee, then *b'in* is chosen.

The hypothesis was confirmed by the answers and translations that MChKY provided me with. The preference for using either expression depending on motion towards, or away from the addressee was clear from the examples produced in the test:

(5.77) *je7 in-suht u-jeer k'iin*  
 ASSUR 1SG.A-return 3SG.A-other day  
 'I will return in a few days'

(5.78) *b'in in-ka7 ich san.kristoob'al sahman*  
 FUT2 1SG.A-do LOC TN tomorrow  
 'I am going to San Cristóbal (de las Casas) tomorrow.'  
 [060918 MChKY]

(5.77) is a response to a hypothetical person's question about when MChKY will return to the village where we are at the moment of utterance. (5.78) is an example of an opposite situation where the speaker states that he is going away from the place where the speaker and addressee habitually find themselves.

MChKY indicated in a discussion about the two available expressions that if he asks me when I will return, then I should not answer *b'in inka7 suht oojk'iin*, ('I will return in the evening'). I would have to say *je7 insuht oojk'iin* ('I will return in the evening'). There is thus a correlation between the direction inherent in the semantics of motion verbs and the use of *je7* and *b'in inka7* as seen in the examples above.

Another relevant parameter that has been mentioned above, namely the dependence on another event/state for the use of *b'i(h)n* to be motivated, is exemplified in the fixed phrase, *b'in inka7* 'I am going to go now', which is said upon taking leave from someone's house.

In the northern dialect, the answer is always *xehn!* '(You may) go!'. The use of *b'in* in phrases of leave-taking is motivated by the *permission* to leave by the addressee in uttering 'Go!'. The speaker is in other words asking the addressee for permission to leave thereby supporting the interpretation that the use of *b'in* depends on another event or on the agency of someone else, which in Lakandon is expressed by the same expression.

## 5.4.2 Intention

The discussion above has already introduced some of the motivations behind the use of *je7...ik(-e7)* and how it contrasts to *b'i(h)n*. In this section the focus will be on *je7*, but reference to the contrast it marks to *b'i(h)n* will also be considered.

The modal future *je7...(-ik)-e7*, is glossed as "assurative aspect" (Hofling 2000: 185) for Itzaj, and "assurative future" (Bricker et al. 1998: 331, Kaufman 1991: 160) for Yukatek.

In contrast to *b'ihn*, *je7...(-ik)-e7*, as indicated by *(-ik)*, combines with the incomplete/plain status. The assurative *je7...-e7* is a mood marker and not an auxiliary verb like *b'ihn*, which as indicated previously, takes the dependent status. The suffix *-e7* may be placed at the end of the phrase that is within the scope of the assertion.

### 5.4.2.1 *je7...-ik(e7)*

According to Hofling (2000: 362), "[t]he assurative aspect-modal marker, *je'(le')* indicates the speaker's strong belief or intention that the action or state indicated by the verb will occur." Kaufman provides glosses by lining up some equivalent translations; 'indeed / definitely / surely / will VERB' (Kaufman 1991: 160). An example to illustrate the construction is given in (5.79).

(5.79) *a-tus-een*      *je7*      *a-tz'ih-(i)k-Ø*      *teen*  
 2SG.A-lie-1SG.B    ASSUR   2SG.A-give-PLN-3SG.B    1SG.IND

*tuhr-i7*      *mansahna(-e7)*  
 CL.IAN-REF apple(Sp.)(-TD.ANA)

'You promised me that you would give me an apple.'

[ALIM questionnaire MChKY: e-0409]

In Lakandon, *je7...e7* indicates intention, will, or ability to do something. It often conveys ‘assurance’ by the speaker, which actually serves to shift the focus on the addressee: “(as you will see), I will VERB”.

An event marked by *je7* will be possible to observe, however not immediately. *je7* lacks any connection to consequence that may be found to be a motivation for the use of *b'in*. Its function is instead focussed on the speaker’s agency.

The future cannot be interpreted with regard to *knowledge asymmetry* as was the case for the investigated past markers, above. This is to be anticipated since the reference to a future event is different from reference based on knowledge of a past event. What is the same is the *non-immediate*-ness of the event with the difference that there is some degree of *assumed access* to the future event. A similarity between reference to past and future events is that when attempting to interpret the use and distribution of *je7...ik(-e7)*, one salient semantic parameter is the presence of the addressee in the proposition.

In a paraphrase of what was said at the end of 5.4.1.2, verbs like *k'uch* ‘arrive’ and *7uhr* ‘return’ imply the addressee as a target for the coming of the speaker. If I tell someone that I will arrive or return at a certain time, then I am commonsensically addressing someone who will be there to see me come (back). Translations of phrases like ‘I will arrive in the evening’ always contain *je7...e7*, and never *b'i(h)n*.

(5.80) *je7 in-k'uch-ur 7oj-k'iin*  
 ASSUR 1SG.A-arrive-PLN.IV enter-sun  
 ‘I will arrive in the evening’  
 [Time questions [EChK, KY] *l.*]

At first, it seems that *je7...e7* could be compared to the past forms *ka7ch(ik)/kuhch* since it focuses on the perspective of the addressee in terms of expectation or, as in the case of *ka7ch/kuhch*, memory. However, the past marker *7uhch* stands in relation to *je7...e7* as well, since it carries an *assurance* by the speaker regarding the validity of a past or future event respectively.

There is a difference in shifting the focus on the addressee with regard to past or future events. Both past forms include the role of the addressee either as being unaware of some event as indicated by *7uhch* (‘before.EXCL’), or as being familiar with an event marked by *ka7ch/kuhch* (‘before.INCL’)



*je7...e7* marks an event as being accessible to the experience of the addressee, but it is an indirect form of access since the event or action is non-immediate and still in the future. Still, *je7...e7* indicates an emphasis on the perspective of the speaker. The addressee has to take the speaker's word for any eventuality that is marked by *je7...e7*. It is markedly different from *ka7ch/kuhch* ('before', 'long ago') since the speaker does not make any assumptions about the expectations of the addressee regarding the event marked by *je7...e7*. There is no common ground that reflects any form of symmetry between the speaker and the addressee in the meaning and use of *je7*.

In (5.81), the semantic parameter concerning the relevance of some event with regard to the addressee is clearly visible. Here the speaker has no role as an agent in realising the event but the *je7* form is still used because of the relevance that the event has for the addressee:

(5.81)a *a-Juan-o7 je7 u-ka7=suht-e7*  
 DET-PN-TD.DIST ASSUR 3SG.A-again=return-TD.ANA

*kir u-b'eet-ik-Ø u-k'aan-ir ja7*  
 SUB 3SG.A-make-PLN-3SG.B 3SG.A-rope-POSS water  
 'Juan is going to come back in order to fix the water pipe'

b *ma7 w-eer ma7 u-b'eet-aj-Ø k-u-tok=a7r-ik-Ø*  
 NEG1 2SG.A-know NEG1 3SG.A-make-CP-3SG.B INC-3SG.A-just=say-PLN-3SG.B

*u-b'eet-ej-Ø*  
 3SG.A-make-DEP-3SG.B  
 'because he didn't do what he promised he would do.'

[HB050211\_3KYYM\_2]

In the second half of the phrase, the lack of consequence is also visible in that the phrase *b'a7kir* ('because') is absent and *ma7 weer* ('you know') is used in its place. The former is used as a lexical means to indicate cause and effect whereas *ma7 weer* is common in personal narratives that reflect a speaker-addressee perspective.

Another example shows the same function in exemplifying the conceptual connection between assurance and intention, namely that they both have relevance for the addressee. The passage is from a story about the "saca ojos" ('it takes out eyes'), which is an animal that supposedly takes out your eyes if you fall asleep in the forest:

(5.82) *je7 u-räk-ik-Ø aw-ich juhyuk'-e7*  
 ASSUR 3SG.A-take.out-PLN-3SG.B 2SG.A-eyes "eye.taker"-TD.ANA  
 'The "saca ojos" is going to take your eyes out'  
 [HB041028\_1CChKY\_7]

The example illustrates the speaker's assurance with respect to the dire consequences of falling asleep in the forest by directing a warning to the addressee. The agency of the speaker is not present but rather an assurance that the addressee will find out what happens if he falls asleep.

In a passage from the same story that was introduced in (5.66), the focus is on the addressee, but still from the *point of view of the speaker*, thus supporting the analysis from the preceding sections on past forms.

(5.83)a *wa k'aat a-b'in aw-ir-ej-Ø a-kiik*  
 Q want 2SG.A-go 2SG.A-see-DEP-3SG.B 2SG.A-sister  
 'if you want to go see your sister,'

b *je7 a-b'in aw-ir-ej-Ø (a)-kiik*  
 ASSUR 2SG.A-go 2SG.A-see-DEP-3SG.B (2SG.A)-sister  
 'you may/can go see your sister.'

[HB040909\_1EChK\_6]

When *je7* marks an event that only involves the addressee then the meaning switches from an epistemic reading to a deontic one. 'Assurance' becomes 'possibility'/'permission'. The conflation of deontic and epistemic modality in the form *je7...e7*, is comparable to what is found in the English mood marker 'may'.

The situation is different for questions directed to the addressee, where it is the intention of the addressee that is requested. Example (5.66) is repeated here to illustrate an interrogative construction involving *je7*.

(5.66)a *y-a7r-aj-Ø wa je7 a-tz'ee-(i)k-Ø teen a-ti7ar*  
 3SG.A-say-CP-3SG.B Q ASSUR 2SG.A-give-PLN-3SG.B 1SG.IND 2SG.A-child

*kij*

QUOT

'He said; if you give me your child, he said'

b ne nuuk aw-o(7)och käy  
 very big 2SG.A-CL.food fish

*k-in-b'in in-tz'aa-Ø-Ø teeçh*  
 INC-1SG.A-FUT2 1SG.A-give-DEP-3SG.B 2SG.IND  
 'I'll give you very big fish'

[HB040909\_1EChK\_6]

None of the examples that most clearly illustrate a focus on the addressee can be said to reflect the expectations of the addressee, as the relevant parameter in understanding the semantics of *je7*. However, the speaker's perspective is prevalent throughout, in one case stating the possibility, or permission, granted the addressee (5.83), and in the other asking for the intentions of the addressee (5.66).

An additional example illustrating the deontic meaning of *je7* is seen in (5.84) where the sentence is understood to indicate the speaker's ability to climb a tree, paired with a lack of desire to do so. This connotation is predicatable from the analysis above, namely that the agency-ability of the speaker together with the presence of the addressee (in the speech situation), are the two determining factors in interpreting the use of *je7*.

(5.84) *je7 in-na7k-är ich che7 ma7 in-k'aat-i7*  
 ASSUR 1SG.A-climb-PLN.IV LOC tree NEG1 1SG.A-want-SCOPE  
 'I can climb this tree, but I don't want to'  
 [ALIM questionnaire MChKY: e-0441]

As stated at the outset of the description of *je7...e7*; it is clear that the defining semantic content indicates the speaker's intention and ability, and that this is directed towards an addressee who is central to the motivation for using the form. At the same time, the expectations of the addressee are excluded from the encoded semantics of *je7...e7*.

It appears that the "future" conflates the emphasis on the speaker and the addressee and the symmetry relations between the two into one form. In stating his intentions the speaker at the same time takes the addressee into account but not with regard to his/her expectations but to the relevance that some future event will have for the addressee even if it does not directly involve the speaker.

### 5.4.3 Summary: expectation and intention in future time reference

To determine the semantics of the available “future” constructions that were introduced in section 5.4, we must find out what the differences are between the forms and how speakers choose between them.

The choice between *b'ihn* and *b'in ERG-ka7* does not appear to depend on relative distance from the moment of utterance in terms of temporality, but is rather a question of *degree of expectation* with regard to a non-immediately accessible (i.e. future) event. In discussing the semantics and use of both markers, consultants consider *b'ihn* to carry a weaker, or less determined, expectation whereas *b'in ERG-ka7* has a higher degree of expectation attached to it. This differentiation is conceptually connected to the labels that were introduced at the outset of the chapter with regard to reflexes of the markers in Yukatek and Itzaj, i.e. *indefinite future* and *immediate future*.

The latter construction is also available for past “irrealis” reference equivalent to a phrase like ‘I was going to go, but in the end I couldn’t make it’ (see section 4.1.3.2). This feature does not support a semantic analysis in terms of tense or event order, which is a conclusion that Bohnemeyer also reaches for cognate forms in Yukatek (cf. Bohnemeyer 1998).

The strategies available for referring to future events have interesting connections to the semantic features that we have seen for present and past eventualities, but there are also some distinct differences. The division into speaker- and event-dependent time reference is clearly visible in future time reference and is represented by the AM markers *je7..ik(-e7)* and *b'in ERG-ka7* respectively.

There is no knowledge asymmetry relation present in the indexical ground with regard to future time reference for the simple reason that there is no definite knowledge to be had about such events. One important relational feature of future time reference is *expectation*. This semantic parameter can also be found in reference to past events, but in a different way. Expectation in past time reference concerns the knowledge of the speech participants, or expectations about who knows what, whereas in future time reference one form of expectation is with regard to the *realisation of some event*. This suggests that such expectation is an event-dependent parameter in reference to a future event.

The relational feature *intention*, which is the second main feature in the semantics of future time reference, necessarily involves the addressee, making it comparable to an

asymmetrical reference to a past event since the speaker chooses to involve the addressee by committing to the realisation of an event. This makes expressions that contain intention as a semantic feature speaker-dependent in reference to future events.

The kind of expectation that pertains to the speech participants is present in *je7..ik(-e7)* as well (see section 3.3.3). This form of expectation is derived from the one found with *b'in ERG-ka7* but shifts the reference perspective from an event (i.e. event-dependent reference) to the speech participants (i.e. speaker-dependent reference). *b'i(h)n* reflects a low/high expectation with regard to the realisation of an event. *je7...-ik(-e7)*, on the other hand, draws on the expectations of the speech participants with regard to the actions of the speaker or his predictions about the realisation of some event. The division between event- and speaker-dependency is at its clearest in these two forms. In *b'i(h)n*, the motivations for its use draws on pragmatic considerations such as “non-agency of the speaker” and “dependency on another event”. *je7* on the other hand, is an assurative modality marker that refers to the speaker’s agency and/or the certainty that the speaker entertains with regard to the realisation of an event. This assurance and certainty automatically includes the addressee in the act of reference, in part for the simple reason that there is no reason for making an assurance if there is no one to direct it to.

Although the difference between *b'i(h)n* and *je7* cannot be described in terms of knowledge asymmetries, the event- vs. speaker-dependency can be viewed in terms of speaker-addressee focus. An event-dependent reference only reflects the speaker’s expectation whereas the speaker-dependent perspective includes the addressee’s presence in the proposition.

The comparisons of overlapping patterns between present-past and future reference should be made for the simple reason that time perception is a process that links together the future-present-past in a way that can be discerned in the semantics of time reference in Lakandon Maya. The system is not symmetric, but this is a situation that is familiar from the systems for tense marking in Germanic languages such as Swedish as well as in several other well documented Indo-European languages. Despite differences in marking, the data suggests that it is motivated to discuss time reference as a uniform concept.

## 5.5 Event-dependent time reference

Although event-dependent time reference has been introduced in section 5.4 above with regard to a future time, it is also available for temporal reference to the “present”, and to some degree to the “past”. As stated previously, event-dependent time reference does not exclude a deictic perspective in an act of reference. It does however, emphasise the connection between some state-of-affairs, to another event, which stands in a dependency relation to the event referred to. This dependency can be in terms of *consequence* and *result*, or *sequentiality* and *parts-of-events*. Section 5.5.1 will deal with the former two dependencies and 5.5.2 with the latter two.

### 5.5.1 Consequence and result

The particle (-)we7 is a particle-clitic that attaches to other particles (i.e. adverbs) or to entire phrases. It has been observed in both NL and SL as they are spoken in Lacanjá, but we7 is more frequently used by speakers of SL, which may imply that its presence in NL is a result of contact. If at all translated, it is usually assigned the corresponding Spanish word ‘despues’ (‘then’) or the expression ‘para que’ (‘for that reason’). I have been unable to identify cognates of we7 in Yukatek or Itzaj.

we7 has the function of relating a (directly accessible) event to a previous event or state that is the cause of the one marked by we7. It is a *temporaliser* in the sense that it refers to a previous event on which a present state of affairs depends, similar to anaphoric tense reference. Possibly because of a similar distribution to proper time deictics, (-)we7 can also be translated as ‘now’. It cannot, however, answer “when-questions”, which disqualifies it as a tense marker and a proper time deictic.

It has the relational value *resultative* and it is the clearest example of an event-dependent marker in the language. Its semantic description does not depend on relating it to features found in the indexical ground dimension, and although it is available for several communicative functions, they are not crucial for the semantic definition of we7.

In this section, rather than using the communicative functions to divide it into subsections, we will explore the combinatory possibilities of (-)we7 and thereby view its function and meaning.

#### 5.5.1.1 7ab’ahywo7

The most common combination of we7 with another stem is in the topicalised expression 7ab’ahywo7 ‘now, (because of this)’. 7ab’ahywo7 can be dismantled

morphologically into four parts; *7a-*, the determiner that is used to topicalise an expression; *-o7* which is the “distal” terminal deictic marker; *b’ahy* ‘like this’, which is a manner particle with deictic properties; and *-we7* which by being followed by *-o7* is a bit obscured since the *-o7* phonologically obscures the *-e7* present in *-we7*. Thus: *-we7* > *-we7-o7* > *-wo7*. *7ab’ahywo7* is always translated as ‘now’ but has a different function from *b’aje7(re7)* because of its *resultative* semantics.

An example of *7ab’ahywo7* that demonstrates its use as a deictic expression was observed at the kitchen table of EChK’s house one afternoon. KY was trying to fix a table clock that had been broken for some time. When it worked, the clock announced the time with an electronic voice, which probably meant that it belonged to EChK’s father, who is sight impaired. KY had opened the clock up and was pulling at the chords inside it to locate the problem. After a while the clock suddenly announced what time it was (although not the correct time, of course) and this was followed by a triumphant cry from KY, who yelled: *-7ab’ahywo7!* (‘Now, then!’), directed to the others sitting at the table to indicate that he had fixed it. The example illustrates a distributional and conceptual overlap between the use of *b’aje7* (section 5.2.1) and *7ab’ahywo7*, which likely is responsible for the identical translation provided for both forms.

After finishing the narration of a story, KYYM concludes by telling me that the story indeed is finished. He does this by saying that he has told me everything he has to say and that the story therefore is complete:

- (5.85)a *ja7ri7 k-inw-a7r-ik-Ø*  
 no.more INC-1SG.A-say-PLN-3SG.B  
 ‘That’s all I am going to say’
- b *ab’ahywo7 tz’o7kij in-tzikb’a-t-ik-Ø*  
 now.E.DEF finished 1SG.A-talk-TR-PLN-3SG.B  
 ‘My story is therefore finished now’
- [HB050211\_1KYYM\_1]

In (5.85b), *7ab’ahywo7* refers back to the utterance in (5.85a) where KYYM states that he has no more to say. Another instance of *7ab’ahywo7* comes from yet another of KYYM’s stories. In the story, a Lakandon is tricked by a vulture that has transformed into his wife. The vulture-wife appears in the jungle when the man is out hunting and the man is surprised to find his wife out in the woods looking for him (see also section 5.2.1.1, ex 5.6):

(5.86)a *ik-nuuk-ir b'a7 u-b'ehr t-a-p'ät(-aj)-Ø ik-atooch*  
 1PL-great-POSS what 3SG.A-road COM-2SG.A-leave-CP-3SG.B 1PL-house  
 'The ancient: why have you left our house?'

b *ma7 w-ir-ej-Ø ab'ahywo7 t-u-juhnan*  
 NEG1 2SG.A-see-DEP-3SG.B now.E.DEP PREP-3SG.A-alone

*p'aht ik-atooch*  
 leave.MPASS.CP.IV 1PL.A-house  
 '(because of this) Now our house is left alone (unguarded)'

[HB050225\_1KYYM\_2]

In example (5.86), there are obvious parallels to how *7ab'aje7* is used to indicate a contrast to a previous event (as seen in section 5.2.2). The difference, of course, lies in the presence of the resultative meaning that makes reference to the reason for the present state.

From the same story comes another example of *7ab'ahywo7*, which although it makes reference to a past event (5.87a), still is translated as 'now' since it is a result of a previous state, comparable to directing the attention of the addressee to asymmetrically accessible information:

(5.87)a *a-tah yaan ich naj-o7*  
 DET-SP.R.DIST EXIST LOC house-TD.DIST

*k-u-b'in u-jur-ej-Ø y-oj b'äk' u-maam*  
 INC-3SG.A-go 3SG.A-hunt-DEP-3SG.B 3SG.A-CL.food meat 3SG.A-H  
 'There she was in the house, her husband had gone hunting for food'

b *ab'ahywo7 mix k-u-b'in suht toj=kihm-in*  
 now.E.DEP NEG2 INC-3SG.A-go return now.INCL=die-PLN.IV  
 'Because of this, now he was not coming back, he was already dead'

c *ch'oom chi7-ej-Ø*  
 vulture eat-AF.CP-3SG.B  
 '(It was) the vulture (that) ate him'

d *a-ch'oom-o7 k-u-räk=chi7-ik-o7on*  
 DET-vulture-TD.DIST INC-3SG.A-all=eat-PLN-1PL.B  
 'The vulture eats us all'

[HB050225\_1KYYM\_2]



The mapping onto *b'aje7re7* is again illustrated by repeating example (5.6) from section 5.2.1.1, above:

- (5.6) a *t-in-p'ät-aj-Ø*                      *kij*      *tah*              *nahch-i7*              *kij*  
 COM-1SG.A-leave-CP-3SG.B QUOT    SP.R.DIST    far.away-TD.LOC    QUOT  
*ich*   *k'ahx*   *ich*   *k'ahx*   *t-inw-u7kuch*              *kij*  
 LOC forest    LOC forest    COM-1SG.A-return(?) QUOT  
 'I left it, he said, far away in the forest, he said. I am coming back from the forest, he said.'

- b *ma7*   *w-ir-ej-Ø*                      *b'aje7r-e7*                      *kij*      *ti7*              *yaan*  
 NEG1 2SG.A-see-DEP-3SG.B now.EXCL-TD.ANA    QUOT    SP.ANA    EXIST  
*ti7*      *yaan*      *in-juur-o7*  
 SP.ANA    EXIST    1SG.A-catch-TD.DIST  
 'You know, now, he said. It is there, my catch is there.'

- c *pero*      *b'in*   *u-ka7*              *tu7-tahr*      *kij*              *ab'ahywo7* *kij*  
 but(Sp.)    FUT2 3SG.A-do    rot-ASSUM QUOT    now.E.DEP QUOT  
 'But it will spoil, he said, because of this (me being a ghost), he said  
 [HB050225\_1KYYM\_2]

It is apparent that the presentation of information as having resulted from a previous event in some ways is comparable to, and may overlap with the presentation of personal knowledge. *7ab'ahywo7* has no temporal anchoring other than its relation to the eventuality that requires its presence. It can refer to a present, future, or past event. *7ab'ahywo7* represents the beliefs of the speaker but relates them to some *cause* that is the reason for those beliefs. Despite this distributional and to some degree conceptual overlap, *7ab'ahywo7* and *b'aje7* must be described separately because of the crucially different motivations that underlie the use of the two forms.

#### 5.5.1.2 *we7* in other contexts

As an individual particle, *we7* is placed immediately after the phrase that it modifies but always refers back to a previously stated reason for that same modified phrase.

An example of the use of *we7* comes from the first time that I visited KYYM's (K) house. I was accompanied by KYYM's nephew, MChKY (M) since we had already discussed going there to record KYYM's stories. KYYM may have been a little surprised that I had no questions to ask him, so to clarify the situation and my presence,

MChKY offered to help me by explaining in Lakandon Maya to his uncle what I (HB) wanted him to do:

(5.88)a K: *jach=t'aan*

true=word

'in Lakandon Maya?'

b M: *jach=t'aan a-tzikb'a-t-ik-Ø we7 kij sook*

true=word 2SG.A-talk-TR-PLN-3SG.B E.DEP QUOT SUB

'Tell your story in Lakandon maya, he said, because...'

c HB: *k'uj*

god

'About God'

d M: *k'uj baxik a-tzikb'a-t-ik-Ø a-biktahb'ar*

god like.this 2SG.A-talk-TR-PLN-3SG.B DET-how

*a-ba7kir u-k'aab'a7 aw-eer-ej-Ø*

DET-what 3SG.A-name 2SG.A-know-3SG.B

*b'a7 ka7 b'in a-tzikb'a-t-ej-Ø b'axik u-k'aab'a7*

what SUB go 2SG.A-talk-TR-DEP-3SG.B like.this 3SG.A-name

*b'axik k-in-b'in in-tzikb'a-t-ej-Ø we7*

like.this INC-1SG.A-FUT2 1SG.A-talk-TR-DEP-3SG.B E.DEP

'About God, this is how you tell your story, like, what he is called, since you know; then you tell him what he is called, like: I will tell you, then'

e M: *a-b'a7kir we7 b'axik aw-a7r-i(k)-Ø*

DET-what E.DEP like.this 2SG.say-PLN-3SG.B

'That, (because of what I have told you) is what you say'

[HB050211\_1KYYM\_4]

In using *we7* to mark his statement in (5.88b), MChKY refers to what we have spoken about on a previous occasion, namely that I was interested in recording some traditional stories and personal narratives told by MChKY's uncle. In (d) and (e), *we7* refers to what MChKY has just told KYYM, explaining what stories he should tell based on what I had told MChKY that I would like to record.

If example (5.86) from the previous section is extended by two lines, it contains an example of how *we7* attaches to the second person pronoun, *teech*. The same morpho-phonological processes are at work in the expression *7ateechwo7* as was described for *7ab'ahywo7* above, namely that the TD marker *-o7* obscures the *-e-* in *we7* and only leaves the *-w-*.

- (5.89)a *ik-nuuk-ir*    *b'a7 u-b'ehr*    *t-a-p'ät(-aj)-Ø*    *ik-atooch*  
 1PL-great-POSS what 3SG.A-road COM-2SG.A-leave-CP-3SG.B 1PL-house  
 'The ancient: why have you left our house?'

- b *ma7 w-ir-ej-Ø*    *ab'ahywo7*    *t-u-juhnan*  
 NEG1 2SG.A-see-DEP-3SG.B now.E.DEP    PREP-3SG.A-alone

*p'aht*    *ik-atooch*  
 leave.MPASS.CP.IV 1PL.A-house  
 '(because of this) Now our house is left alone (unguarded)'

- c *y-a7r-aj-Ø*    *a7r-a7b' ti7 tehn u-raak'*  
 3SG.A-say-CP-3SG.B say-CPASS PREP by 3SG.A-H  
 'he said, she was told by her husband'

- d *a-teech-w-o7*    *k-a-b'in*    *a-kuch-ej-Ø*    *b'äk'*  
 DET-2SG.IND-E.DEP-TD.DIST INC-2SG.A-FUT2 2SG.A-carry-DEP-3SG.B meat  
 '(because of this) now you will carry meat'

[HB050225\_1KYYM\_2]

There are also examples of *we7* modifying other time words such as *b'aje7* ('now', 'today') and *sahman* ('tomorrow'):

- (5.90) *a-b'aje7-w-o7*    *b'in in-ka7*    *in-ka7=päk'-ej-Ø*  
 DET-now-E.DEP-TD.DIST FUT2 1SG.A-do 1SG.A-again=sow-DEP-3SG.B  
 'Today I am going to continue to sow'

[ALIM questionnaire MChKY: e-0466]

- (5.91) *je7 wa a-b'ehyaj sahman we7*  
 ASSUR Q 2SG.A-work tomorrow E.DEP  
 'Will you work tomorrow?'

[ALIM questionnaire MChKY: e-0495]

In these instances, which are elicited, the speaker translating phrases in Spanish, uses *we7* to provide the isolated phrases with some rudimentary context. Although the reason

for uttering the two phrases in (5.90) and (5.91) is absent in the process of elicitation, the speaker chooses to add the particle *we7* to indicate that there is a cause for saying, “today I am a going to continue to sow” or to ask someone if they will come work tomorrow. So although unspecified, dependency can be indicated by the presence of *we7* despite a lack of immediate mention of a reason for an event/action.

### 5.5.2 Sequentiality and parts-of-events: *sahm*

The temporal distance markers that were introduced in the section devoted to the grammatical description of temporal operators in Yukatek and Lakandon (section 4.1.2) are semantically defined with regard to the temporal distance to the moment of utterance, hence making them deictic in nature. *7uhch* (‘before’, ‘long ago’) makes reference to a time a few days or a week removed from the day of utterance; *sahm* (‘recently’, ‘a while ago’) refers to a past time within, or just before the diurnal time span; and *tahnt* (‘just’, ‘a moment ago’), decreases that distance to the immediate past.

This semantic description may lead one to think that there is a semantic and conceptual *symmetry* between the forms in meaning and that the only semantic feature that separates them is their relative distance to the moment of speech. In Lakandon, this is a misleading conclusion especially given the semantic definition that *7uhch* is given in its function as an adverb (section 5.3.1).

#### 5.5.2.1 *sahm* and *sahmin*

Aside from being a distance marker, *sahm* functions as an adverb in a similar way to what was reported for *7uhch*, above. It appears that the use of *sahm* as an auxiliary-distance marker or as an adverb is completely arbitrary, at least in direct elicitation. In recorded material, *sahm* as an adverb is actually preferred to its distance marking function since the only examples of *sahm* in the corpus are in the form of adverbs. This could in part be anticipated from the fact that *sahm* has lost its function as a verbal predicate outside of being an AM-marker, exactly like *7uhch* (cf. section 6.2).

The meaning of the adverb *sahm* has little to do with temporal distance but at the same time it is also void of the kind of modality-like content that is reported for *7uhch* (section 5.3.1). The latter fact is not surprising since there – commonsensically, at least – is less need for a form that asserts an eventuality as personal knowledge if it happened earlier on the same day. Reasoning along these lines by connecting temporality to knowledge asymmetries is found in sections 5.3.3 and 5.6.2.

I will save the reader the suspense and present the relevant conclusions that I have reached, and then devote the space below to support my claims regarding the semantics and the pragmatic requirements of *sahm*.

The point of view adopted throughout this investigation is that speaker-dependent time words and particles in Lakandon function to orient the speaker and the addressee with regard to some eventuality that is either *directly accessible*, i.e. ‘present’; *directly inaccessible*, i.e. ‘past’; or *non-immediately accessible*, i.e. ‘future’.

The main function of *sahm* is not related to any of these three perspectives. *sahm* is instead used as a device to make reference to one part of an event within a temporally situated chain of events. The most salient difference between *sahm* and *7uhch*, for example, is that *7uhch* refers to a discrete eventuality that may, or may not, be contrasted to the moment of speech. This is of course a reflection of the difference between the two proposed perspectives, *speaker-* and *event-perspectives* (section 5.1.2.4). *sahm* belongs firmly with the latter perspective.

*sahm* can only make reference to a *part of an event* or activity that is connected to a previous or following part of the same “macro”-activity/event. As such, *sahm* contains an element of *sequence* that is absent in an adverb such as *7uhch*. Possibly because of its sequential nature, *sahm* can take different forms (i.e. *sahnsam*, *sahmin*, *sahm*, *sahmak*) and make reference both *backward* and *forward* in a chain of events.

Another feature, that has to be considered secondary because of its indeterminate nature, is the “break” between events/activities that are connected in the way sketched above. This break is best thought of as a “temporal lag”, meaning that the event that is modified by *sahm* does not occur directly after the previous or following event, but that something intercedes between events. In some examples, this break is more clearly stated than in others.

(5.92)a *ka7=chook uy-oor wichame*  
 again=sad 3SG.A-mind PN  
 ‘Wichame became sad again.’

b *sahmin-e7 k-u-ka7=mahn 7usir*  
 SEQ-TD.ANA INC-3SG.A-again=pass king.vulture  
 ‘After some time, the king vulture passed by again.’

c *7aw-eer*      *a7-usir-o7*      *säk*  
 2SG.A-know    DET-king.vulture-TD.DIST white  
 ‘as you know, the vulture is white’  
 [HB050728\_1AChKYK]

In example (5.92), which is a traditional narrative about an owl who harasses a Lakandon, a sequence of events is related that describes an exchange of favors between the man and a king vulture who eventually helps the man get rid of the owl. The extracted phrases in (5.92) start when the man has just tricked the vulture, who responds by flying off. This in turn makes the man sad since he needs the vulture’s help with the owl. The following section, which is omitted from the example, describes the next interaction between the man and the vulture. The whole segment consists of a string of interactions, all of them ending with the vulture helping the man get rid of the owl by throwing it into the ocean.

*sahmin* (*sahm-in*) is a nominalized form of *sahm* that refers forward in the story to the following segment. In this context *sahmin* has no deictic function but rather works as a device for laying out the events of a story. A comparison can be made to English expressions, like ‘afterwards’ or ‘after a while’, both of which may function as deictic and non-deictic expressions depending on the context where they are used. Like the latter expression, the translation indicates the aforementioned break between Wichame’s state of sadness and the return of the vulture.

Example (5.93) contains the same form, *sahmin*, and is an extract from another traditional narrative where a skunk is taught how to hunt by a jaguar. In the end it does not go well for the skunk but in the extract below, the jaguar has just killed a small cow and promises to wait for the skunk while he goes to get his mother:

(5.93)a *y-a7r-aj-Ø*      *la*    *chäk=b’ahrüm*    *in-pa7k-ech*      *maam*  
 3SG.A-say-CP-3SG.B ND spotted.jaguar    1SG.A-wait-2SG.B companion  
 ‘The jaguar said: I’ll wait for you buddy.’

b *como*    *ma7 ik-eer*      *b’oon*      *nahch-ir*    *y-atooch*  
 like(Sp.) NEG1 1PL.A-know how.many far-NOM    3SG.A-house  
 ‘We do not know how far his [the skunk’s] house was.’

c *ma7 ik-eer*  
 NEG1 1PL.A-know  
 ‘We don’t know.’

d *ya sahmin ka7 ka7=uhr-ir-Ø mänä7,*  
 so(Sp.) SEQ when again=return-PLN.IV-3SG.B NEG.EXIST  
 ‘After a while when he [the skunk] came back, there was nothing.’

e *u-räk=kuch-qj-Ø maam*  
 3SG.A-all=carry-CP-3SG.B companion  
 ‘His friend had carried everything off.’

f *mäna7 mix käx=b’ay cheen u-k’i7k’-er*  
 NEG.EXIST NEG2 small=thing only 3SG.A-blood-POSS2

*p’ah-t-Ø*  
 leave.MPASS.CP-3SG.B  
 ‘There was nothing, not a crumb, only some blood was left’

[HB040905\_2EChK\_5]

In (5.93), *sahmin* has the same function as in the previous example (5.92), above. It connects two parts of a (larger) chain of events. If the sequentially connected sub-events had been bounded off from each other as separate activities that depended on the completion of the previous activity before commencing with the following, another expression would be used, namely *tz’o7k(ir)* (‘finished’).

When one event or activity is concluded before another starts, *tz’o7k* is used to indicate the break. *sahmin* on the other hand makes no such separation between events but only refers to the next stage in a series of connected events. The non-defined time lag that can be inferred between the going and returning of the skunk in example (5.93) is expressed overtly by the narrator in stating that we have no way of knowing how far away the house of the skunk was. The trip to the skunk’s house is not relevant to the story and neither is the amount of time that passes between events. An example illustrating the difference in function and use between *tz’o7kir* and *sahmin* is seen in example (5.94) below:

(5.94)a *je7r-oj a-ti7 t-u-t’ahb’-ar u-k’a7k’-ir*  
 OST-TD.DIST DET-PREP DUR-3SG.A-alight.MPASS-PLN.IV 3SG.A-fire-POSS  
 ‘This one [the Lord of the forest] learns how to make fire’

b *t-u-k’a7k’-t-qj-Ø y-o7ch b’äk’ a-winik*  
 COM-3SG.A-fire-TR-CP-3SG.B 3SG.A-CL.food meat DET-person  
 ‘The man cooked his food’

- c *y-a7r-aj-Ø*                      *tz'o7kir*  
 3SG.A-say-CP-3SG.B CPL.SEQ  
 'Afterwards, he said.'
- d *t-in-chi7-aj-Ø*                      *b'aje7*              *t-in-k'a7k'-t-aj-Ø*  
 COM-1SG.A-eat-CP-3SG.A      now.EXCL      COM-1SG.A-fire-TR-CP-3SG.B  
 'Now I have eaten it cooked.'
- e *b'in-i-Ø*  
 go-CP-3SG.B  
 '(then) he left.'
- f *y-a7r-aj-Ø*                      *ti7*      *winik*      *b'in*      *in-ka7*      *y-a7r-aj-Ø*                      *xehn*  
 3SG.A-say-CP-3SG.B      PREP person      FUT2 1SG.A-do 3SG.A-say-CP-3SG.B      go.IMP  
 'The man said: I'm going to go. [The Lord] said: Go!'
- g *sahmin* *ka7*      *y-u7y-aj-Ø*                      *yahwot*      *t-u-ka7teen*  
 SEQ      when 3SG.A-hear-CP-3SG.A shout      PREP-3SG.A-again(RELN)  
 'After a while he heard a shout for a second time.'
- h *äy*      *tu7*      *yaan-eech*  
 hey      where EXIST-2SG.B  
 'Hey! Where are you?'
- i *y-a7r-aj-Ø*                      *te7*              *yaan-een*  
 3SG.A-say-CP-3SG.B      SP.SC      EXIST-1SG.B  
 'He said: here I am!'
- j *y-a7r-aj-Ø*                      *suht-en*              *ir-een*  
 3SG.A-say-CP-3SG.B      come.back-IMP      see-1SG.B  
 'He said: come back to see me!'

[HB040909\_1EChK\_6]

There is a clear difference between the use of *sahmin* and *tz'o7kir* in example (5.94). The latter term indicates a completion of one activity (i.e. eating cooked food) before leaving. *sahmin* on the other hand ties together the first meeting between the Lakandon and the Lord of the forest, when the cooked food was eaten, with a second exchange that follows after the Lakandon has left (not included here).

Example (5.95) is a story about how women could get sick if they went into the ancient ruins that were used as temples, where the men prayed to their gods. It is possibly transmitted as a warning for keeping women away from a place where the men sat around singing and getting drunk on *b'alche7* (a fermented drink made from the



bark of a tree) although this is of course my own interpretation. All such traditions have largely been abandoned by now and stories connected to them are only remembered by older people.

- (5.95)a *ma7 a-jat-ik-Ø teeč a-k'iin=yaj kij*  
 NEG1 2SG.A-open-PLN-3SG.B 2SG.IND 2SG.A-pray=sick QUOT  
 'Help me pray, he said'
- b *ba7 u-b'her in-raak' ka rihk' t-u-po7 kij*  
 what 3SG.A-road 1SG.A-wife SUB rise PREP-3SG.A-menstruation QUOT  
 'because my wife has a lot of menstruation'
- c *ya7b' u-po7*  
 much 3SG.A-menstruation  
 'a lot of menstruation'
- d *je7r-aj je7 in-k'iin-t-ik-Ø*  
 OST-TD.PROX ASSUR 1SG.A-pray-TR-PLN-3SG.B  
 'this one (the healer): I will pray for her'
- e *entonces sahmij taar-ij-Ø*  
 so(Sp.) SEQ come-CP-3SG.B  
 'so after a while he came'
- f *je7 wa u-ch'een in-raak'*  
 ASSUR Q 3SG.A-get.well 1SG.A-wife  
 '(the man) Will my wife be well?'
- g *y-a7r-aj-Ø je7 u-ch'een-e7 kij*  
 3SG.A-say-CP-3SG.B ASSUR 3SG.A-get.well-TD.ANA QUOT  
 '(the healer) He said, she will get well, he said'
- h *na7k-eech ich y-atooch ik-nuuk-ir*  
 go.up-2SG.B LOC 3SG.A-house 1PL.A-great-POSS  
 'Did you go up into the house of the ancestors?'
- i *y-a7r-aj-Ø na7k in-raak'*  
 3SG.A-say-CP-3SG.B go.up.CP 1SG.A-wife  
 '(the man) He said, my wife went up'

[HB040924\_1EChK\_1]

The form *sahmij* is a variant of *sahmin* and clearly has the same function and meaning. In an elicited example, the same form, *sahmij* used to relate one sub-part of a state to another. This is done without any reference to the diurnal time span, but instead marks

an event that sequentially depends on a previous state and eventually produces a subsequent change of state.

- (5.96) *uhchik säj-k-een ti7 tooy t-inw-atooch,*  
 REM afraid-DEP.IV-1SG.B PREP spider PREP-1SG.A-house  
*sahmij [EChK] t-uy-a7r-aj-Ø teen ma7 yäk*  
 SEQ [PN] COM-3SG.A-say-CP-3SG.B 1SG.A.IND NEG1 poisonous(?)  
*a-b'aje7 mix k-in-säj-t-ik-Ø mana7*  
 DET-now.EXCL NEG2 INC-1SG.A-affraid-TR-PLN-3SG.B NEG.EXIST  
 'I used to be afraid of spiders (that were) in my cabin. Later, EChK told me  
 that they were harmless and since then, they do not scare me at all.'  
 [Time questions.txt: EChK]

In an extract from another traditional story told by EChK, about a man who looks for a jaguar that has eaten all his dogs, *sahm* is used in a way that is ambiguous in the sense that it is difficult to determine if it refers backwards or forwards in the story.

- (5.97)a *tz'o7kir nä7k y-u7y(-aj)-Ø u-cheen 7ahwot*  
 TERM.SEQ rise.CP 3SG.A-hear(-CP)-3SG.B 3SG.A-only shout  
*k-u-läj=k'äy u-peek'*  
 INC-3SG.A-all=bark 3SG.A-dog  
 'After he got up, he heard a yelp, the dogs were all barking.'
- b *y-a7r-a7 ti7 chan p'aht chan*  
 3SG.A-say-CPASS PREP small leave.MPASS small  
 'It was said, there was only one left'
- c *tu7 b'in chan jun-tuhr-i7 k-u-k'ehy jo7 jo7*  
 where go.CP small one-CL.AN-REF INC-3SG.A-bark SS SS  
 'Only one (dog) was barking where he was going: voff, voff'
- d *sahm b'in-i*  
 SEQ go.CP  
 'after a while he left'
- e *porke ne nuuk aj-näj=tz'uuru7*  
 because(Sp.) very lage DEF-jaguar.king  
 'because the jaguar was really big'

[...]

f y-a7r-aj-Ø                      ti7    b'in  
 3SG.A-say-CP-3SG.B    PREP    REPORT  
 'He said, it was said.'

g tu7    läj=b'in-i-Ø  
 where all=go-CP-3SG.B  
 'Where did they all go?'  
 [HB040917\_1EChK\_11]

From the translation given by the speaker, it appears that *sahm* refers forward to a time after the man has seen that most of his dogs have been killed. This is contrary to the translation of *sahm* as a deictic expression for past time reference as discussed in 5.5.2, above. As indicated by the example in (5.96), which appears slightly ambiguous, *sahm* appears to be available for referring to events both backward and forward, just like *sahmin*.

#### 5.5.2.2 *ma7 sahmak*

A derived expression, *ma7 sahmak*, is only used for past time reference. In fact, *ma7 sahmak* is the most common expression to be used as a distance marker in auxiliary position, but it is only present in elicitation and is unattested in the corpus. This is probably due to an existing bias with regard to genre and types of recorded speech of the corpus.

*sahmak* probably contains the same adverbial focus marker that is attested for *7uhch-ik*, but the process of vowel harmony has changed it into *-ak* (*sahm-ak*). Another interpretation is that *-ak* is a cognate of the *-(he)-ak* suffix found in Yukatek that marks "dates" such as days, months, etc.

(5.98) *ma7 sah-m-ak*                      uhr-(u)k-een  
 NEG1 REC-ADV.FOC    return-DEP.IV-1SG.B  
 'I returned a while ago'  
 [ALIM questionnaire EChK, KY]

However, it appears that *ma7 sahmak* also has a use as an adverb since its position can be shifted to appear after the verb phrase:

- (5.99) *t-inw-ir-aj-Ø*                      *ma7 sahm-ak*  
 COM-1SG.A-see-CP-3SG.B    NEG1 REC-DEP.IV  
 ‘I saw it a while ago.’  
 [ALIM questionnaire EChK, KY]

Not only the syntactic placement of *ma7 sahmak* in (5.99) favours describing it as an adverb, but the status of the verbphrase is completive, which as we have seen is not allowed with *sahm* as a distance (AM) marker. Together with *7uhch*, *sahm* only takes the dependent status, which was one argument to put the two together in the same grammatical paradigm (cf. section 4.3.1)

It appears that speakers use both *sahm* and *sahmin* in a way that closely resembles another expression that is derived from *sahm*, namely *sahnsam*, which is discussed next.

#### 5.5.2.3 *sahnsam*

For speakers of the southern dialect of Lakandon, the main variant of *sahm* that is used for making reference both backward and forward from the moment of utterance is *sahnsam* (‘a while ago’, ‘in a while’). Speakers of the northern dialect also make use of *sahnsam*, but mainly for “forward” reference. In elicited examples, there is some variation to these facts, which is unclear to me at the moment, but *sahnsam* is always used to make reference to the near future in the corpus by speakers of both dialects.

An example of *sahnsam* comes from a story about a Lakandon named “Baaker”, a name that can be translated as ‘body’ or ‘bone’. The story about Baaker is long and complicated, but the context in example (5.100) is that Baaker is in the underground trying desperately to get back home. There he meets a girl whose father is the “devil”. Both Baaker and the devil have been drinking and the devil is about to wake up. The girl wants to leave with Baaker before that happens.

- (5.100) a *tz’ahw-a(7)*    *ti7*    *k-y-a7r-a7*                      *ti7*  
                     ?-IMP                      PREP INC-3SG.A-say-CPASS    PREP  
                     ‘Hurry, she said’
- b *b’in u-ka7*    *rihk’-ir*    *in-teet*    *k-y-a7r-a7*                      *ti7*  
                     FUT2 3SG.A-do rise-PLN.IV    1SG.A-F INC-3SG.A-say-CPASS    PREP  
                     ‘My father is going to get up, she said’

[...]

- c *ku7=ku7x k-y-a7r-a7 ti7*  
 REDUP=come.IMP INC-3SG.A-say-CPASS PREP  
 ‘Let’s go right now! She said’
- d *b’a7 a-ka7 k-y-a7r-a7 ti7 kuhx*  
 what 2SG.A-do INC-3SG.A-say-CPASS PREP come.IMP  
 ‘What are you doing?, she said, Let’s go!’
- e *je7 w-o7 y-u7b’-ik-Ø ik-nuuk-ir*  
 ASSUR E.DEP-TD.DIST 3SG.A-hear-PLN-3SG.B 1PL.A-great-POSS  
  
*xahn-e7*  
 also-TD.ANA  
 ‘The ancient heard it too’
- f *yaj je7r-e7-e7 yaan paj-e7(n)*  
 already(Sp.) OST-TD.ANA-TD.ANA EXIST lying.on.side-ADJ  
 ‘He waited for a while (lying on his side)’
- g *je7r-e7 sahn<sup>sam</sup> we7 t-u-rihk’-ir b’in*  
 OST-TD.ANA SEQ.FW E.DEP DUR-3SG.A-rise-PLN.IV REPORT  
  
*a-kisin-o7*  
 DET-devil-TD.DIST  
 ‘After a while then, the devil got up’
- h *je7r-o7 jehb’ y-oor a-kisin-o7 je7r-o7*  
 OST-TD.DIST come.out.CP 3SG.A-mind DET-devil-TD.DIST OST-TD.DIST  
 ‘The devil had become sober’

[HB050211\_2\_2KYYM]

The use of *sahn<sup>sam</sup>* is non-deictic like the previous examples of *sahmin* since it relates to the time line of the story and not the moment of utterance. The motivation for its use is equally clear in that it makes reference to one part of a chain of events that is considered to be connected in a non-bounded off sort of way. The following segments of the story (not included here) offer no contrast to the event in example (5.100) and are just a continuation to the long journey home for Baaker.

In example (5.101) *sahn<sup>sam</sup>* is used in a similar way by connecting two events of a story. It is difficult to argue for any specific duration or temporal distance as a salient feature of the semantics of *sahn<sup>sam</sup>*, which was also the case for *sahmin*, as discussed above (section 5.5.2.1). In the examples we have seen so far it is impossible to determine whether *sahn<sup>sam</sup>* means that an event occurs right after another or if there is

a lag between them. It is my impression that this parameter is of less importance than the sequential, connective function that we have observed for both expressions.

- (5.101) a *k-u-ka7=t'an-ik-Ø*                      *u-ja7wen*   *y-a7r-aj-Ø*                      *ti7*  
 INC-3SG.A-again=say-PLN-3SG.B   3SG.A-BW   3SG.A-say-CP-3SG.B   PREP

*taar-eech*   *ja7wen*

come-2SG.B BW

'He says once again: sister-in-law, he said, now you have come.'

- b *ween-eech*   *ja7wen*   *ween-eech*   *mix*   *k-u-nuuk-ir*  
 sleep-2SG.B BW              sleep-2SG.B NEG2 INC-3SG.A-reply-PLN.IV  
 'Are you asleep sister-in-law? Are you asleep? No answer.'

- c *ween-ij*              *entonces*              *k-u-k'uch-ur*                      *b'uj*  
 sleep-CP.IV so(Sp.)              INC-3SG.A-come-PLN.IV owl  
 '(When) she was asleep (then) the owl came.'

- d *k-u-nihch'-ir*                      *ich*   *u-k'ahr*              *u-ka7n*  
 INC-3SG.A-attach-PLN.IV LOC   3SG.A-neck   3SG.A-hammock  
 'He sat down on the "neck" of the hammock,'

- e *sahnsam-e7*   *k-u-t'ook-ar*                      *u-jo7r-e7*  
 SEQ-TD.DIST   INC-3SG.A-crack.CPASS-PLN.IV 3SG.A-head-TD.ANA  
 'and after a while, her head came off.'

- f *ff*              *b'in-i-Ø*              *b'in*              *u-ja7wen*  
 SS              go-CP.IV-3SG.B go.CP.IV   3SG.A-BW  
 'Swoosh, she left, the sister-in-law left'

- g *bueno*   *rihk'-ir*              *y-a7kab'*              *yejer*              *y-ihtz'in*  
 well(Sp.) rise-PLN.IV   3SG.A-quickly   with              3SG.A-yZ  
 'Well he [the owl] took off quickly with his "little sister".'

[HB041028\_2CChKY\_1]

For *sahm(in)* or *sahnsam* to be used in a deictic sense, it appears that two conditions have to be met: 1) the speaker must consider the event referred to by *sahm* to be a relevant part of some state-of-affairs that holds at the moment of utterance regardless if it is used for backward or forward reference; 2) the connection between the events cannot be one of separation from one another or one being dependent on the other. The two events, (the moment of utterance and the previous or later point in time) must be continuous in some sense. Used deictically, *sahm* requires a temporal separation from



to a point in time and therefore favours an interpretation of *sahnsam* as containing a “time lag” between two events.

For Yukatek, Hanks (1990) includes some observations regarding the semantics of *sahm*. He argues that *sahm* has “spatial corollaries” and provides an example that may at the same time support the conclusions that I have reached for *sahmin* and *sahnsam* in Lakandon.

Hanks gives an example where he had been sitting together with a consultant, Man, in the same location for a couple of hours discussing the Maya (Yukatek) language. Man said the following:

YUK

(5.103) *wa cheen t-aw-a7-(i)k-Ø*  
COND only COM-2SG.A-say-PLN-3SG.B

*je7x 7uhch-ik ma7 sahm-a7-a7*  
OST happen-ADV.FOC NEG1 while-TD.PROX-TD.PROX  
‘If you just say it, as you did not long ago...’

(Hanks 1990: 395, [my orthographic adjustments and glossing])

Without any prompting on Hanks’ part, Man continues to explain the meaning of (*ma7 sahm a7*), and why he used the expression. According to Hanks, Man’s choice of ‘not long ago’ reflected the fact that they were *still engaged* in conversation at the table. “There had been no break in our location to motivate referring to an earlier utterance as having occurred in the past.” (ibid: 395):

(5.104) a *sahm-a7-a7 t-u-meen ma7 sahng*  
REC-REDUP=TD.PROX PREP-3SG.A-because NEG1 REC

*k-uy-uhch-u(r) ich-il-o7n-a7*  
INC-3SG.A-happen-PLN.IV LOC-NOM-1PL.B-TD.PROX  
‘*sahm a7 a7* because not long ago it occurred among us’

b *mix jun-tuhl luk'-uk-i7-i7.*  
NEG2 one-CL.AN leave-DEP- REDUP=TD.LOC  
‘Not one (of us) has left (here).’

c *entonces ka luk'-o7m te7l-a7*  
so(Sp.) when leave-1PL.B SP.SC-TD.PROX  
‘Now (for example), if we left here,’



d *ka b'in-o7n te7 le-ja7s-o7*  
 SUB go.CP-1PL.B SP DET-banana.tree-TD.DIST  
 'and went over there by the banana tree,'

e *ka johp'-o7n (i)k-tzikb'al-e7x-Ø le-7asunto-o7*  
 SUB begin.CP-1PL.B 1PL.A-talk-2PL.B-3SG.B DET-event-TD.DIST  
 'and we started talking about the event,'

f *entonses yan aw-a7-(i)k-Ø le-sahm-e.ak-o7*  
 then(Sp.) EXIST 2SG.A-say-PLN-3SG.B DET-REC-TEMP.ADV-TD.DIST  
 'then you'd have to say that 'a while ago' (form)'

(Hanks 1990: 395 [my orthographic adjustments and glossing])

The conclusion that Hanks draws from example (5.104) is that the form *sahmeak o7* in (f) is due to "a break in conversation along with a spatial displacement of one or more of the participants." (ibid: 395). The form *ma7 sahm a7* in (a), on the other hand, is motivated by the fact that Hanks and Man remained in the same place.

Hanks' examples can be compared to my own interpretations regarding *sahm(in)* and *sahnsam* in Lakandon. The context Hanks provides, i.e. that the speech participants had been sitting at a table *doing the same thing* for a couple of hours, means that there was no break in activity and that Man makes reference to something that was uttered earlier that was relevant to what they were talking about at that (later) time. Even the second form of *sahm*, *sameak o7*, is according to Man used to make reference to some part of an ongoing activity, although it (may) include a change in location.

My guess is that *ka7ch* ('before') would be used to make reference to the aforementioned event if there had been a change, not only in location, but in activity. Say, if Hanks and Man had stopped discussing Maya and had gone on to digging a ditch and Man had come to think of, and had made reference to, something that had relevance for what they had been talking about previously. If this would be the case for Yukatek, then that would be partly consistent with the situation in Lakandon where *ka7chik/kuhch* is used to make reference to something that the addressee is expected to remember, but that constitutes a separate event like *7uhch*. In section 6.4, more is said about the function of *ka7ch* in Yukatek.

### 5.5.3 Summary: event-dependent time reference

Lastly, I wish to comment on the organisation of the discussion and analysis in sections 5.4 and 5.5. Given that both sections are mainly devoted to illustrating event-dependent time reference (except for *je7...ik(-e7)*), I do not think it is not motivated to structure the description of these forms in a way that is parallel to the speaker-dependent forms. To repeat what was said in section 5.1.2.4, the motivations and functions behind event-dependent forms are not to situate some eventuality with regard to the speech participants, but to another event. This means that it is not necessary to include the communicative purpose of an expression whose function it is to specify the connection between events. This kind of reference can be explained without taking the communicative function into account.

The formulation of the terms *speaker-dependent* and *event-dependent* perspectives used in time reference largely stems from observing how, what I initially thought were deictic forms, expressed quite different functions. These observations viewed from the A- and B-series time concept made a separation of time reference into speaker- and event-dependent sets seem motivated. Following from this is an emphasis on the description of speaker-dependent time reference partly at the expense of the description of the event-dependent one. Speaker-dependent time reference is better illustrated by being contrasted to event-dependent reference, but the focus of interest lies with the former kind.

This means that I have devoted less effort at determining the borders between conveyed and encoded meaning in event-dependent forms. It is not crucial to the analysis presented in sections 5.2 and 5.3 whether e.g. *non-agency of the speaker* is an encoded or conveyed meaning of *b'i(h)n*: it is clearly part of the motivations for using the form. The same is true for the forms presented in section 5.5.

I do not say this as an excuse for not devoting as much time to the analysis and discussion of event-dependent forms as I have done to the speaker-dependent ones. It is merely a consequence of the chosen focus of research in the present investigation and the limitations in scope set by the format of the thesis.

### 5.6 The use of metaphor in temporal reference

Although the topic of metaphor in time reference may appear peripheral to the investigation, I wish to comment on the relevance that this semantic process has with

respect to Lakandon time words because of the simple fact that it *is* related to the claims of the present investigation.

The widely attested metaphorical use of spatial expressions in time reference (see section 3.1) is not frequently found in my sample of Lakandon Maya speech. However, there is another form of metaphor that is interesting to note in light of what has been discussed in the present chapter, namely the metaphorical use of time words to indicate knowledge asymmetries between the speech participants. This type of metaphor is visible in the meta-discussions of the meaning of the forms and in the way speakers choose to translate the same forms.

### 5.6.1 'Space in time' in Lakandon Maya

Possibly because of the lack of vocabulary (i.e nouns) that denotes time periods and calendrical concepts, i.e. days, weeks, months, years, there is little use for relational nouns and locative particles that are found with spatial descriptions and which in many languages are commonly used in reference to times and dates.

When a speaker specifies the time when something happened, he simply uses the word/expression for the time period without any additional operators/elements, which is a grammatically motivated strategy since such expressions are mainly either *verbs* or adverb-like *particles*. Verbs and particles generally do not function as arguments in a phrase in a way that requires locative operators such as *ti7* and *7ich*, which may explain why relational markers are lacking in the description of specified time periods (but see Bohmeyer 1997, for Yukatek).

In (5.105), the expression *7oj=k'iin* ('evening', lit. '(the) sun entered') is the main prediate of the phrase (which is followed by a separate verbphrase). Although it is a fixed expression it does not function as a particle but consists of an intransitive verb that takes the one-place argument *k'iin* ('sun').

- (5.105) *ka7 o(o)j=k'iin raj-ir-i7 y-u7y-aj-Ø u-t'aan*  
 when enter.CP=sun 3SG.IND-DEF-REF 3SG.A-hear-CP-3SG.B 3SG.A-word/speech  
 'In the evening, he (always) heard the sound (lit. when the sun entered...)'  
 [HB040909\_1EChk\_1]

A related predicate function is found in other diurnal expressions such as *saas(-ir)* ('morning', 'dawn'). *saas* is an adjective/inchoative stem that combines with inchoative suffixes (e.g. *-tahr*).

- (5.106) a *ka7 y-ir-aj-Ø oj=k'iin y-ir-aj-Ø*  
 when 3SG.A-see-CP-3SG.B enter.CP=sun 3SG.A-see-CP-3SG.B  
*yaan uy-atooch*  
 EXIST 3SG.A-house  
 'When he saw (in the) evening, he saw that there was a house.'
- b *pero k-u-saas-tahr [tuhn] y-ir-aj-Ø mana7*  
 but(Sp.) INC-3SG.A-light-ASSUM [then] 3SG.A-see-CP-3SG.B NEG.EXIST  
 'But in the morning (lit. it becomes light...), then he saw nothing.'
- [HB040929\_1EChK\_5]

As suggested by the two examples above, diurnal time words refer to either the location of the sun or the level/presence/absence of light, depending on whether the sun can be seen or not. There is also plenty of room for creative expressions along these lines. It is hazardous for me to say at this point whether an expression is habitually used (except in clear cases where an expression is cognate to a corresponding one in Yukatek), or if it leans more towards being a creative expression. It appears, however, that there are alternatives to the most readily used expressions that are given during elicitation. (5.107) is a paraphrase of *o(o)j k'iin* that we saw in (5.105). This time the expression is also decidedly verbal in character:

- (5.107) *tahn u-b'in k'iin*  
 DUR 3SG.A-go sun  
 'The sun is going'
- [HB040909\_1EChK\_4]

Despite the stated lack of spatial metaphor in time expressions in Lakandon Maya, there are some expressions that can take on a spatial character. In example (5.108), which was introduced in the discussion in section 5.2, ChN asks her husband EChK for the working hours that I had just proposed for us in the coming weeks. In response, EChK naturally does not use a Spanish loan word but instead describes the position of the sun when we are supposed to be done for the day.

- (5.108) *ti7 yaan k'iin kaab'ar ni7 che7*  
 PREP EXIST sun under tip tree

to7n k-ik-a7r-ik-Ø-e7x

1PL.IND INC-1PL.A-say-PLN-3SG.B-2PL.B

‘(Until) late afternoon’ (lit. the sun is below the tip of the trees), is what we said’

[HB040904\_1EChK\_10]

The spatial terminology used in (5.108) does not constitute a metaphorical use of a relational noun phrase, but simply describes the position of the sun. There is arguably a difference between using spatial prepositions like ‘at’ and ‘on’ in making reference to abstract concepts like hours or days, and using relational nouns to describe the position of the sun with regard to the surrounding landscape. There is obviously a lack of abstraction in the way speakers of Lakandon Maya use spatial expressions such as the one in (5.108) to refer to a time of day. This concrete way of making time reference may be related to the absence other time keeping strategies and a calendar that represents the time of day and the time of month, respectively.

If the factual position of the sun is referred to, then it is hard to argue the case that the same position is a *representation* of the position. It is not a symbol for the time of day but is a direct *sign* of the time of day. There is simply no transfer between conceptual domains. If any semantic process can be applied to explain the situation, it is *metonymy*, which means that spatial and (diurnal) time reference belong to the same conceptual domain. No cultural knowledge equal to knowing how to use a calendar or a clock is necessary to decode the meaning of the position of the sun, which suggests that a metaphorical use of spatial expressions is largely absent in Lakandon Maya time reference.

The situation is different in Itzaj Maya which has had more influence from Spanish, and which consequently uses the preposition *ti7* with day names and time periods that suggests a calque from Spanish (cf. Hofling 2000).

A number of other expressions used by speakers of Lakandon in making diurnal time reference reveal more of the same:

(5.109) a *k’a7k’.chun.k’iin*

heat.middle.sun

‘midday’ (lit. ‘the sun in the middle burns’)

b *b’(in)-Ø ik-yuum* (i.e. *b’ik yum*)

go.3SG.B 1PL.A-lord

‘late, evening’; lit. the sun is going’

SL

c *ma7 k'uch-uk-Ø k'a7k'*

NEG arrive-DEP-3SG.B heat

'(mid) morning'; lit. 'the heat has not arrived'

[LAK temporal expressions EChKY, KY]

There are nouns that denote 'year' and 'month', but they also lack accompanying spatial modifiers. They do, however, combine with classifiers like any other noun. Interestingly, a year is classified as separate from a month: *jun-tuhr ya7x k'iin*, (NL 'one year', 'next year'); *jun-tz'ih* *nä7* (NL 'one month'), where *-tuhr* is the inanimate classifier and *-tz'ih* is a classifier of "same size objects" in Lakandon<sup>34</sup>.

Without going into detail, I have observed quite a bit of variation with regard to how a speaker of Lakandon refers to a day removed one or more days from 'tomorrow' or 'yesterday'. This variation suggests that there are indeed very weak calendrical notions in everyday Lakandon speech that can be compared to the ones that are familiar from Western European languages such as English. All calendrical reference is made using Spanish expressions and even those are used in a diffuse way that points to speakers being unfamiliar with using such terminology.

It seems appropriate to include a quote from Merrifield & Baer (1971: 9) who had similar experiences to my own as a result of their efforts to establish a chronological history of the Lacanjá families:

"The Lacandones have no written records for the period dealt with. They do not notch sticks, knot strings, or in any way keep an external record of the sequence of historical events. [...] The estimating of time depths, in particular, has not been an easy task. The Lacandone has practically no linguistic tools for quantifying. Beyond 'one' and 'two' he typically throws up one or two hands, or just says *pimi* 'many'. Questions like "How old..." or "How many years..." do not yield satisfactory answers even in what seem to be the most straightforward contexts."

Although the quote is naïve in stating that a speaker of Lakandon lacks linguistic means for quantification, which is far from true, it reflects some of the issues that are relevant to the present observations regarding time reference strategies.

In conversing with consultants about time words and their meaning, it quickly becomes apparent that there are comparably few traditional ways to keep track of the

<sup>34</sup> The meaning of *-tz'ih* in Lakandon is different from Yukatek and Itzaj where it denotes 'elongated objects'.

passage of time. Even younger speakers will be hard pressed to tell you how old they are. There are no birthday celebrations, no feast-days or fiestas that are both frequent and common in surrounding communities, and no celebration of the New Year. Traditionally, there were celebrations of the harvest and the ripening of the corn. They may still be maintained today, although I never witnessed one.

There are many strategies to keep track of changes in the immediate environment that pertain to the sowing and harvesting of crops, as well as preparing the cornfields, but outside the yearly cycle there is very little precise temporal information to be had.

### **5.6.2 Metaphorical use of time concepts in describing knowledge asymmetry**

The absence of a metaphorical use of spatial operators in the formation of Lakandon calendrical/diurnal expressions is interesting, but not crucial to the topic of the investigation. However, there is another form of metaphor that is used by speakers of Lakandon in time reference. This kind of metaphor has already been discussed in section 5.3.3.1 and 5.3.3.2, and consists of the use of temporal concepts to describe knowledge asymmetries.

Semantic oppositions between forms such as *7uhch*, *kuhch*, and *ka7chik* may originally only have differentiated ‘long ago’ from ‘recently’, but that distinction in temporal distance has shifted to indicate knowledge (a)symmetry between the speaker and the addressee, i.e. the speech participant’s *ability to remember* and *access to knowledge* is conceptualised in terms of temporal distance.

‘Long ago’ means that an event must be qualified in a modal-like way since it is removed from the speaker and the addressee. Recent events are assumed to be more accessible because of their temporal immediacy to the moment of speech. These observations may seem mundane, but they are fundamental to the semantic changes that have occurred in the investigated Lakandon time words when compared to Yukatek and Itzaj Maya.

The manner in which MChKY uses temporal distance to explain the semantic difference between *ka7ch* and *kuhch* in SL, is best viewed as a form of metaphor (see 5.3.3.2). It resembles an English speaker’s use of spatial metaphor to signal perception and emotional states, e.g. ‘He appeared distant when we were having lunch’, or ‘I felt so close to her at that moment (although we were on the phone)’.

The metaphor that is used by Lakandon speakers to signal knowledge (a)symmetry is not directly comparable to the use of spatial prepositions in time reference since the use of the forms themselves, has not shifted from one conceptual category to another. Although it is possible that the knowledge asymmetries found in the time words of Lakandon could be viewed as originating with a separate conceptual-grammatical category, comparable to tense and mood (see section 3.4), the same features can also be viewed from the properties of the *time* concept, and how that concept is manifest in time reference in language.

One conversation about time words displayed the whole range from *spatial* to *temporal* to *knowledge access* all at one. Repeating some of the discussion from 5.3.3.2, MChKY consistently describes the meaning and use of *ka7ch* by saying that, 1) you have to be somewhere else than the place where the (anterior) event that you refer to took place (i.e spatial terminology), and 2) that the place must be nearby since the time-lag between the event and the time when you refer to the same event, cannot be greater than 1 day (temporal terminology). So, if you say, *k'ucheen ich San Cristóbal ka7ch*, ('I arrived in San Cristóbal a while ago') you would have to be somewhere near San Cristóbal, like Ocosingo or Comitán, because of the temporally proximal meaning. This discussion must be placed in the context of how *ka7ch* contrasts with *kuhch* and how that form fits into the scheme concerning knowledge asymmetry that is proposed in sections 5.2 and 5.3.

MChKY contrasts *ka7ch* with *kuhch*, which according to him makes reference to an event that can be further away in time than *ka7ch*. If one looks at the use of *kuhch* in texts and discourse, it is apparent that temporal distance is inconsequential to the meaning of *kuhch*: it can be used to designate either an event that happened a moment ago, or years ago, the only parameter of meaning that is relevant to the forms is that the addressee is familiar with the event, or the information, that the speaker refers to.

As already stated in the same section, 5.3.3.2, an identical meta-discussion is not found in NL due to the differences in meaning and use of the form *ka7ch(ik)* but speakers of both dialects consistently conceptualise the meaning of *ka7ch(ik)* and *kuhch* in terms of temporality. They group them with other time words such as *7uhch*, although as I have shown above, the semantics of *ka7ch(ik)/kuhch* and *7uhch* cannot be determined by temporality parameters, but do indeed pertain to the more "modal-like" features of knowledge access and the speaker's commitment, i.e. the perspective of the participants.



## 5.7 Chapter summary

The discussion that will tie together the analysis and interpretations presented in this chapter is postponed to the following chapter. I will only briefly summarise some main points here before moving on to that discussion.

Using some of the same terminology and concepts that Hanks uses in his investigation of Yukatek deixis, I have proceeded to account for the encoded meaning present in, and pragmatic motivations relevant to, a small but important number of time words that are central to acts of temporal reference in Lakandon Maya: *b'aje7*, *tok*, *7uhch*, *ka7ch(ik)*, *kuhch* and *je7...ik(-e7)*.

I have combined strategies of observing the forms in-use and how that use relates to the speech participants and the context wherein they perform their acts of reference, as well as obtained negative evidence and speaker judgements from consultants in meta-discussions about the use and meaning of the forms. The resulting interpretation and analysis reveals a socio-centric perspective used in making reference to events that either has been overlooked in previous research on cognate forms in other Yucatekan languages, or has developed independently in Lakandon Maya (see section 6.2 and 6.4, for a discussion).

The investigated forms were divided into two perspectives, *speaker-* and *event-dependent*, that were proposed as a result of the distinct motivations that could be seen from their meaning and use.

The resulting question whether the chosen perspective of research has determined the results and the interpretation of the same results is motivated but not vital to the discussion and analysis that follows in chapter 6. It is something that, in my opinion, almost all other investigations of tense and event-order has suffered from to an equal degree, the only difference being the degree of consensus that those investigations have had with regard to each other.

## 6. Discussion of time deixis in Lakandon Maya

The purpose of this final chapter is to tie together and draw some conclusions from the information that I have presented so far on the semantics of time deictics in Lakandon Maya. Here, I will place the analysis of Lakandon time deictics in relation to what was discussed in the background chapter with regard to A- and B-series time and Yukatekan deixis more generally (section 3.2).

As already stated: you see what you look for. If the time-line is the chosen tool, then the emerging picture of time in language will be centred on that perspective and that idea.

If, on the other hand, time reference is investigated from the perspective of the speech participants and their motivations for making reference to a specific point in time, then those participants and their perspectives are going to be a part of the view.

The picture that has emerged from the latter perspective makes sense in comparison to the analysis of deixis that Hanks promotes for Yukatek, since it unifies the semantics that are relevant for an understanding of that category. The feature oppositions that are salient for other dimensions of deixis, such as *space*, *perception*, and *person* are reflected in deictic reference to *time*, thus confirming the proportionality between deictic dimensions that was observed by Hanks for Yukatek (see section 5.1.2).

The experience of being in the world, as it can be observed in the meaning and use of time words, is different from – but no less complex than – the description of the physical space that we occupy. It is perhaps even more intricate judging by the number of forms, and their semantic diversity, that relate to time deixis. The partitioning of space is very much a culturally conditioned practice that requires a high level of detail in order to be even superficially described. One should therefore expect the categorisation of segmented experience (i.e. states, events, and activities) to be no less detailed. Because time deixis can be nothing else than classificatory reference to experience from the perspective of the speaker; not excluding the perspective of other speech participants, as they are reflected in the beliefs of the speaker.

The distinctions between *symmetric* and *asymmetric*; *accessible* and *inaccessible*; *immediate* and *non-immediate* are important to mapping out the semantics of Yukatekan deixis, as we have seen for both Yukatek and Lakandon Maya. They can be found throughout the system for deixis on both a lexical and a grammatical level and are fundamental to the interpretation of deictic forms in Yukatekan languages.

Another conceptual feature that is important for the description of time is the one between *speaker-perspective* and *event-perspective*. This terminology was introduced to reflect its pragmatic origin, but it is also mirrored in the familiar labels *absolute* and *relative* time reference, which are already established concepts in the linguistic literature.

One way to achieve relative time reference is to use lexemes that have a basic deictic function as non-deictic expressions simply by placing their point of reference at some other time than at the moment of utterance. This transfer is e.g. observed with regard to *sahm(in)*, which although it is traditionally described as a “recent past”-deictic particle, has had its use and meaning shifted towards becoming a sequential operator of chains-of-events. From the observed division between speaker- and event-perspective, this transfer must be viewed as a consequence of the pragmatic motivations underlying the two perspectives.

Furthermore, we may also discuss the findings in light of what has happened to cognates of the same forms in the related languages Itzaj and Yukatek. It is my intention to try and summarize these and place them in a larger picture that may have something to say about time in language in general as well as its specific expression in Yukatekan languages.

More specifically, I will provide an to answer the following questions:

1. What are the salient semantic features of temporal reference in Lakandon and how do they conform to a general view of time in language that has been promoted in works such as Comrie (1985), Klein (1994) and Bohnemeyer (1998)?
2. How do the attested forms in Lakandon compare to cognate forms in Itzaj and Yukatek with regard to form, function, and meaning?
3. Is the expression of deictic time reference in Lakandon Maya relevant to defining the category of deixis in Yukatekan languages as previously described and investigated by Hanks (1990) and how do the results presented here conform to those previous observations?
4. Is the philosophical concept of A- and B-series time relevant to the analysis of the investigated forms in Lakandon Maya and is this dual time concept appropriate for their definition?

Other observations are also relevant to summarising the findings of the present investigation, most importantly that time reference may indeed be imbued with quality and that the origo needs a richer description than the, 'time of present experience' definition that is promoted by Klein (1994).

The results presented below are an effort to interpret and analyse time reference in a specific language, Lakandon Maya, and although the topic of time reference has been extensively investigated, it has often chosen a very limited, pre-defined set of parameters for its investigation.

### **6.1 A unified account of time deixis in Lakandon Maya**

It appears impossible to gather the semantic features of all investigated time words under one roof, so to speak. Forms belonging to the speaker-perspective are different from event-perspective forms in more ways than a difference in the point of reference suggests. Event-perspective forms can be used as deictic expressions – which in fact often reflects their original function – but the motivations for their use is fundamentally different from the speaker-perspective forms.

Using a deictic time word (i.e. grounded in a speaker-perspective) in Lakandon Maya means that the speaker situates himself and his memory/expectation with regard to the eventuality he refers to in a manner that also considers the position of the addressee. An event-dependent time word on the other hand primarily relates one event to a reference-event in way that is free from the presence of the perspective of the speech participants.

It is also the case, however, that some event-dependent time words (e.g. *ab'ahywo7*) may be used in a way that resembles speaker-perspective expressions (i.e. *b'aje7(re7)*), resulting in identical translations provided by speakers in elicitation (i.e. 'now'). However, the motivations for their use remain separate although their distribution may overlap to some degree depending on the context in which they are used.

Although future time reference often is conceptually distinct from other forms of time reference, such a distinction is only partly confirmed by the data of the present investigation. In order to maintain the conceptual speaker- and an event-perspective division, future reference is split down the middle since one of the forms, *je7...(-ik)-e7*, semantically belongs to the speaker-perspective and the other, *b'i(h)n*, belongs to the event-perspective.

As it were, *je7... (ik)-e7* reflects perfectly the participant perspective found in *7uhch* by featuring both the speaker's assurance/commitment and the relevance to the addressee. However, the two expressions differ with regard to the relational value, which necessarily is distinct because of the temporal separation into past- and future reference. Despite this difference, I argue that *intention* must be compared to *knowledge-memory* and the speaker's possibilities of placing himself with regard to some information.

*b'i(h)n* on the other hand, is free from both the intention/assurance of the speaker and relevance to the addressee, i.e. a future event that is referred to using *b'i(h)n* only pertains to the *expectations* of the speaker, strong or weak, and excludes both the speaker's immediate agency and the inclusion/exclusion of the addressee.

### 6.1.1 Speaker-perspective

Time words that are classified as belonging to a speaker-perspective are, at least initially, best described using a three-dimensional representation that allows a clear display of all the important dimensions of meaning. This form of representation – although perhaps not common to linguistic investigations – features all three dimensions of meaning on separate axes, namely the *relational features*, the *indexical ground*, and the *communicative functions*. The graphic structure has been borrowed from Hanks' (1990) exposé of the ostensive deictics in Yukatek and is motivated by the already demonstrated affinity between the speaker-dependent time deictics of Lakandon Maya and the ostensive deictics of Yukatek.

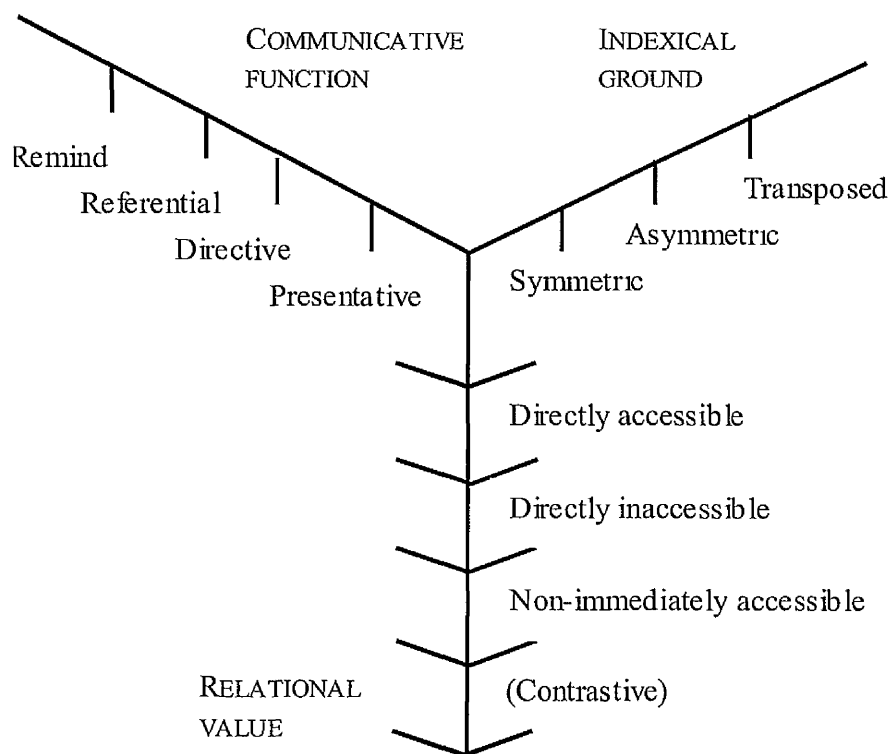


FIGURE 6.1 THREE-DIMENSIONAL REPRESENTATION OF THE SEMANTICS OF LAKANDON TIME DEICTICS (after Hanks 1990).

Although the three-dimensional figure above includes the three dimensions of meaning together with the values belonging to each dimension, it does not provide a description of the specific meaning features of the investigated forms. To draw a separate graphic representation of the values found with each form would be both cumbersome and possibly hard to read. Instead, a representation of the semantics present in the individual forms used in speaker-dependent time reference is displayed in a table format below. This representation provides an easy overview of the relevant features of a specific form that can be traced to the three-dimensional representation in Figure 6.1, above:

	INDEXICAL GROUND	RELATIONAL VALUE	COMMUNICATIVE FUNCTION
<i>b'aje7</i>	asymmetric	directly accessible	presentative, directive, referential
<i>tok</i>	symmetric	directly accessible	referential, remind
<i>7uhch</i>	asymmetric	directly inaccessible	presentative, referential
<i>kuhch/ka7ch(ik)</i>	symmetric	directly inaccessible	referential, remind
<i>je7...(-ik)-e7</i>	asymmetric	non-immediately accessible	presentative, directive, referential

TABLE 6.1 SPEAKER-DEPENDENT TIME DEICTICS.

All features listed together with the forms are taken from the three-dimensional representation in Figure 6.1. The semantics of each form represents a unique configuration in the three-dimensional structure, primarily with regard to the indexical ground and the relational values. The fact that the communicative functions are at least twofold with each form means that each form has at least two unique configurations within the structure.

A lot has been said already about the first four forms in the table above, but I wish to include some additional comments here. Firstly, it is clearly visible in Table 6.1 that the indexical ground stands in a direct and predictable relationship to the communicative function. This fact is an important reason for including the communicative function as a separate semantic dimension in the description of Lakandon time deictics. A symmetry situation in the indexical ground means that only the referential and remind functions are available for forms such as *tok* and *kuhch/ka7ch(ik)*. Similarly, the asymmetric forms feature *directive* but not *remind*, which reflect an important contrast in the function and meaning of the forms.

The relational value is limited to *perceptual accessibility* in terms of what can be directly experienced, and is not further specified for temporal distance in contrast to what has been reported, e.g. for the corresponding AM marker *7uhch* (see section 4.1.2; Bergqvist 2006; Bohnemeyer 1998).

It is important to emphasise that the proposed semantic analysis of the forms must be viewed from the context in which they occur. The use of *b'aje7* ('now', 'today') conforms to expectation with regard to the wide variety of discourse- and pragmatically conditioned uses that has been reported for 'now' in English (Schiffrin 1987). However, its function and semantics must be understood from the language specific conditions that we encounter in Lakandon Maya. On its own, the analysis of *b'aje7* would not constitute a convincing case for the conclusions presented here, but when viewed as one out of five forms containing features that appear proportional across the category of deixis in Yukatekan languages with regard to *symmetry relations*, *access*, and *communicative function*, one has to acknowledge its function within that same system.

As stated in the sections that describe the separate forms, morpho-syntactic operations are available that produce topicalisation and focus constructions. These operations do not result in a change of the semantics of the forms but rather adds the feature *contrastive* to the already assigned relational values in topicalised forms. Focus

forms have no detectable addition to their semantics from observations of their use in analysed speech.

I have chosen to present the speaker-dependent forms used in temporal reference in a way that draws on how Hanks (1990) discusses the ostensive forms of Yukatek. There is no *ad hoc* reason for this choice, but it is rather a consequence of the pragmatic motivations of the forms and their resulting semantics. Speaker-dependent time reference is made ostensively in that a speaker presents temporally situated events to the addressee depending on the previous knowledge/present attention of the addressee with regard to the event. This view of speaker-dependent temporal reference is also suggested by the presence of the ostensive morpheme *je7*, in the form *b'aje7*, which could be analysed as consisting of *b'ehr je7*, meaning something like, 'this road' (see Hanks 1990: 394 for Yukatek).

An illustration of the use of *b'aje7* in ostensive-like reference comes from the already cited story about when CChNK gave birth as a young woman (see also section 5.2.1.3; example 5.12). In this example, there are also examples of *7uhch* combined with *je7* as a way of making ostensive reference to past events in contrast to the event referred to using *b'aje7*.

- (6.1) a *oorak inw-a7k-t-ik-Ø in-b'aj uhch ti7*  
 almost 1SG.A-put.down-TR-PLN-3SG.B 1SG.A-REFL before.EXCL PREP  
*k-inw-a7r-ik-Ø k-in-kihm-in jach 7a-uhch*  
 INC-1SG.A-say-PLN-3SG.B INC-1SG.A-die-PLN.IV very DET-before.EXCL  
 'I was on the verge of tears, and I said (to him) that I am going to die'
- b *b'aje7 7a-je7 juntuhr uhch-o7 7a-ray ma7*  
 now.EXCL DET-OST other before.EXCL-TD.DIST DET-ND NEG1  
 'Now, this other time, not that one,'
- c *tahb'ar ka7 in-k'äs=rooch-aj-Ø a-ra7 uhch-o7*  
 soon when 1SG.A-some=cradle-CP-3SG.B DET-ND before.EXCL-TD.DIST  
*a-je7 uhch-o7*  
 DET-OST before.EXCL-TD.DIST  
 '(it came) soon after I just gave birth, that one, that time'
- d *jach yaj 7a-uhch-o7 7a-ma7 7in-rooch*  
 very pain DET-before.EXCL-TD.DIST DET-NEG1 1SG.A-cradle



*a-uhch*

DET-before.EXCL

(there was) a lot of pain this other time, not the one when I gave birth then  
[Cuando nació mi hija, UCLAK]

As seen in (6.1), CChNK attempts to direct the attention of the addressee using several forms that draw from the entire range of deictic forms. *b'aje7* is used initially to direct the attention of the addressee to a time that is distinct from the one she had discussed up to that point (6.1b). It does not function as a present marker that makes reference to 'the moment of utterance' but simply directs the attention of the addressee to a contrasting, previously unmentioned event. The regular ostensive form *je7* and the nominal deictic form *ra7* (cf. Yukatek, *le*) are then used together with *7uhch* in an attempt to clarify the shift already indicated (6.1b-6.1c). This is done in order to navigate between two contrasting *past* events, i.e. two separate births that were very differently perceived by the speaker. There are obvious formal and semantic parallels between the forms illustrated in the example above and the ostensive forms that Hanks investigates for Yukatek. Example (6.1) clearly illustrates the usefulness of a framework for describing speaker-dependent forms that draws on the one Hanks uses for Yukatek ostensive deictics.

As a comment to example (6.1), it is appropriate to take up the discussion from section 5.3.3.3 where the use of terminal deictics (TDs) in time reference was discussed. Given the attested function of the suffixes *-a7* and *-o7* in Yukatek (cf. Vapnarsky 2000) to indicate (among other semantic features) individual and shared knowledge in time reference, the example in (6.1) is a representative example of what their function is in Lakandon Maya.

The use of *-o7* as a TD in topicalisation is above all syntactically motivated (6.1b-c). Since the intention of the speaker is to shift the attention of the addressee to a contrasting event (i.e. asymmetrically accessible information) that is actually *closer* temporally (a second time she gave birth) it is contradictory to a corresponding function found in Yukatek where the features shared knowledge and (relative) temporal distance is associated with the *-o7* form. The use of TDs with the investigated forms are attested outside of topicalisation but this use cannot be placed on the same level of meaning with time deictics such as *7uhch* and *ka7ch(ik)/kuhch*. Another illustration of this can be seen in a repeated example from section (2.4). The use of *-a7* in this example must be

understood together with the initial deictic (ID) *je7-*, rather than *7uhch*, which instead attaches to the same *je7-* by conveying a temporal instance of the ostensive reference:

- (2.4) *b'axik 7a-je7 7uhch-a7 t-uy-a7r-qj-Ø mahk-o7b'*  
 like.this DET-OST before-TD.PROX COM-3SG.A-say-CP-3SG.B people-PL  
 'That's what it was like before, the people said.'  
 [de los dioses UCLAK]

From my understanding of this instance of *-a7*, it could convey a number of features that are connected to temporal proximity, access asymmetry, discourse function, as well as contrastive strategies in relating states to each other. It is my conviction that *7uhch* remains unaffected semantically by the choice of TD and that its encoded meaning exists on a different level compared to the meaning found in *-a7*.

This view is supported by a second example (also repeated) from section 4.4.2.2 where *-a7* is again found with *7uhch*:

- (4.53) *b'axik u-7istoria7 in-suku7n kaj taar-Ø*  
 how 3SG.A-story 1SG.A-oBr when come-3SG.B  
  
*te7 xahn uhch-a7*  
 SP.SC also before.EXCL-TD.PROX  
 'That's the story (about) when my brother came here too.'  
 [HB050211\_1KYYM\_1]

As for example (2.4), the one in (4.53) also has *7uhch* together with a spatial deictic form, *te7r-a7* ('here'). Again, the use of *-a7* is primarily motivated by *te7r-* to denote spatial proximity. *7uhch* has the same meaning and function that I argue for in section 5.3.1 and remains unaffected by the presence of either TD-suffix.

It appears that the use of TDs in Yukatek to signal (knowledge) asymmetries has been lexicalised in forms such as *7uhch* and *ka7ch/kuhch*, thereby reserving temporal reference by situating events with regard to the speech participants to those forms. In other dimensions of reference, the function of the TDs remains intact (cf. 4.4.2).

The way speaker-dependent time reference is made in Lakandon also does not resemble reference to space in Yukatek since the semantic opposition between an ego-centric/socio-centric perspective is absent. The idea of ego-centrally defined "temporal regions" as opposed to socio-centric partitive "temporal locations" are not borne out from the results of the present investigation. There is no attested cognate of

the expression *tolakjeako7* that Hanks discusses for Yukatek (see section 3.2.1). What we *do* find in time reference forms is a socio-centric perspective that grounds the figure with regard to the symmetry relation of the speech participants.

In addition, there are observable communicative functions in the use of temporal deictics that also lend a comparison to the ostensive forms of Yukatek. Spatial reference using spatial deictic forms does not have communicative function as a defining semantic dimension. Given the observable traits present in speaker-dependent time deictics in Lakandon; why do they map onto the ostensive forms rather than the spatial/locative ones?

I believe the most important reason is that speaker-dependent time deictics fail to explicitly locate events in time. This line of reasoning has already been promoted (mostly) with regard to aspect-mood marking in Yukatek (see Bohnemeyer 1998), but it is also relevant for the semantic definition of time particles in Lakandon.

The adverb-like time words *b'aje7*, *tok*, *7uhch*, and *kuhch/ka7ch(ik)* place an event primarily with regard to the *memory/knowledge/attention* of the speech participants and not on the time line. There is no question that e.g. *7uhch* makes reference to past events, but that fact is more connected to the concept of “direct non-accessibility” that specifies the speech participants’ experiential access to an event and their memory of that event, rather than to a specific “location” in time, which as we have seen cannot be specified in a phrase containing the AM-marker *7uhch*.

I have also shown that *7uhch* and *kuhch/ka7ch(ik)* constitute a contrastive set specifying the knowledge asymmetries of the speech participants. However, only *7uhch* is appropriate in answering a when-question using either *tu7 k'iin* (‘what time today’, lit. ‘where is the sun’) or *b'ehr* (‘when’, ‘what day’). Although *kuhch/ka7ch(ik)* are translated as ‘before’ and ‘previously’, they have no temporally defined semantics to match those translations. A similar analysis is promoted for the contrastive set *b'aje7-tok*.

### 6.1.2 Event-perspective

The reasons for introducing the concept of event-perspective come from observing the distribution and use of time words that I initially imagined to be purely deictic in nature and semantically comparable to forms such as *7uhch*, *kuhch/ka7ch(ik)*, and *b'aje7*.

In the Yukatekan literature, *7uhch* is always described alongside *sahm* and I had the impression they have identical grammatical functions and that the only semantic

difference between the forms consisted of *the degree of temporal distance* that the forms referred to, i.e. a difference between 'long ago' and 'recently'. However, as I have shown in some detail above, this situation is not reflected in the use and distribution of *sahm(in)* and several other forms that I had supposed to be deictic in function and meaning (see section 5.5).

Although originally described as a deictic adverbial, *sahm(in)* has a relative, sequential function in the description of events and chains of events. It has an obvious use in making reference to recent events with regard to the moment of utterance, but that is not where we most readily find it. The main reason for separating *sahm(in)* from *7uhch* is, of course, that the former completely lacks any reflection of the speaker's attitude towards the event and that the knowledge/expected memory of the addressee is equally irrelevant to the form.

There is very little by way of direct semantic proportionality in the event-dependent forms, as one could expect from their description, above (section 5.4 and 5.5). Although all investigated event-dependent forms have another event/state as their point of reference, that is where the similarities end. The event-dependent forms are not semantically three dimensional, unlike the speaker-dependent forms, and they are not favourably defined in terms of semantic dimensions at all. A semantic definition of the event-dependent forms is best made in terms of their relational values. The forms can, and do have, communicative functions, but they are not instrumental to their definition. The claim that time is one-dimensional can be appropriately applied to the event-dependent forms.

Below is a summary of the semantics of the investigated, event-dependent forms used for time reference. However, the same goes for some of these forms as it does for some of the speaker-dependent forms from above: even though they are used as time words, they may sometimes not be used to answer when-questions.

	TIME DEICTIC	SEMANTIC FEATURE(S)
<b>Future</b>		
	<i>b'i(h)n</i>	Non-immediately accessible, weak expectation, non-speaker agency
	<i>b'in</i> ERG- <i>ka7</i> / <i>k</i> -ERG- <i>b'in</i>	
<b>Temporal Sequence</b>		
	<i>sahmin</i> / <i>sahnsam</i>	Sequential, immediate
	<i>pahchir</i>	Sequential, non-immediate
	<i>tz'o7kir</i>	Sequential, terminative
<b>Resultative</b>		
	<i>7ab'ahywo7</i>	Resultative, directly accessible
	<i>-we7</i>	Resultative

TABLE 6.2 THE SEMANTIC FEATURES OF EVENT-DEPENDENT TIME DEICTICS.

The analysis of *b'ihn* and *b'in* ERG-*ka7* may appear arbitrary in the sense that reference to a future time necessarily contains a measure of modal meaning (i.e. speaker evaluation/qualification of some event) especially since we already have established that future time reference is not tense-like by way of grounding an event on the timeline. Speaker perspective is indeed modal-like, which is why it would seem that the two forms should be part of this paradigm and not the event-perspective.

However, the presence of *expectation* in the semantics of *b'ihn* and *b'in* ERG-*ka7* does not make them comparable to the speaker-dependent forms. The expectations that are connected to events must be separated from expectations that exist between the speech participants (see section 3.3.3). This separation also means that only certain modality parameters are included in speaker-dependent reference, such as *assurance* and *commitment*, and that others like *expectation* and *probability*, belong somewhere else. It is not enough for the speaker to qualify an act of reference by modality parameters in order to regard such reference as speaker-dependent, rather the speaker must be at the centre of reference, i.e. be the sole point of reference, together with his appreciation of the perspective of the addressee with regard to the same event.

Expectation on the realisation of an event that does not directly involve the speaker or which at least does not involve the speaker's agency, does thus not have the speaker as a point of reference. Instead, a *cause* or general expectation of how events

usually unfold, are points of reference in place of the speaker-addressee perspective. Again, this point of reference must be separated from the purely temporal point of reference that also is present in the same forms, although not explicitly as encoded meaning. What the former point of reference describes are the motivations behind the use of the forms, which determine their semantics to an equal degree compared to the time frame that they also encode.

Aside from being contrasted to each other, *b'ihn* and *b'in ERG-ka7* also contrasts with *je7...(-ik)-e7*, which constitutes a contrast between speaker- and event-perspective. Although a semantic feature like, *relevance to the addressee*, is not listed as a (non-) feature on *b'ihn* and *b'in ERG-ka7*, this is in essence the most important difference between the latter forms and *je7...(-ik)-e7*, combined with the intentions of the speaker, which is seen in terms of assurance.

The forms that serve to describe temporal sequence have distinct pragmatic motivations and semantics. Their functions contradict, in part, Bohnemeyer's argument that Yukatek lacks lexical and morphological means to overtly express event-order. In Lakandon, at least, the three sequence operators, *sahm(in)*, *pahchir*, and *tz'o7kir*, specify the sequential connection between two events as either *immediate*, *non-immediate*, or aspectually separated from an event by the *termination* of the event that serves as the point of reference. The motivation for using these three lexemes depends on the event/state/activity that E1 and E2 consist of.

If a speaker is referring to something that transpired only a short while ago and which somehow is relevant or connected to what he is doing at the moment of speech, he will likely use *sahmin* or *sahnsam* ('after a while/a while ago'). He uses this form, not only to indicate the short duration that has passed since the event in question, but also to connect it to the present state-of-affairs as being part of a series of events. It appears that both expressions can be used to refer both backwards and forwards from the point of reference and that the direction is determined by the AM-marking on the verb and pragmatic-contextual factors.

If, on the other hand, an event is finished and what happens at the time of speech is a naturally following subsequent, but separate event, then *tz'o7kir* ('after that') will be used. This expression is not specified for temporal duration but implies a short lapse between events from its distribution and use.

A third scenario, where an event that precedes the event referred to, is connected to it as a part of a chain-of-events, but does not *immediately* precede that event. In such

a case, *pahchir* ('later') indicates a temporally separated succession. *pahchir* is used to connect two events that otherwise would be considered as separate, or by way of reconnecting one part of a story with a subsequent part if intermediate events were being related in a way that broke up the storytelling flow.

The situation regarding the explicit marking of event order in Lakandon, as a comment on what Bohnemeyer reports for Yukatek, is that event-order operators like *sahm(in)*, *pahchir*, and *tz'o7kir*, only are used if they need to be. If there is some motivation for specifying the relationship between two events, like a temporal lapse between events or a previous completion of an event, then one of the expressions presented above will be used. If the context does not require it, then no event-order operator will be used.

The difference between Lakandon (possibly including Yukatek) and a language like German is the pragmatic impetus to include a specification of event-order. From Bohnemeyer's investigation it is apparent that German speakers are "required" to use event-order operators to describe a succession of events whereas the results of the present investigation suggest that specific pragmatic conditions must be present for speakers of Lakandon to use expressions of event-order.

The form that refers to a present event, which is dependent on a previous event that is the cause of, or the reason for the present state, is *7ab'ahywo7*. It is commonly translated as 'now' although it does not function as a time word proper since it cannot answer when-questions. It is used to point to a presently accessible event as being a result of a previous event. 'Now, because of this' is a more appropriate gloss for *7ab'ahywo7*. Because of the main function of *b'aje7* as a director of attention, *7ab'ahywo7* can be said to share the same function because of its origin as a deictic manner particle, *b'ahy*, which means 'like this'. However, when combined with *-we7* the resulting expression is a *temporalised manner expression* that is partly mapped onto the function-meaning of *b'aje7*.

## **6.2 Grammaticalisation and semantic shift: the case of *7uhch***

For *7uhch*, there appears to have been a shift in meaning and function when compared to the data available for its cognates in Yukatek and Itzaj. The changes that have occurred are along a path of grammaticalisation that can be seen from changes in grammatical function as well as with regard to the semantics of the expression. Following these changes is the emergence of a system for making reference to events

with specified (a)symmetry relations of the indexical ground. Without the change in status and meaning of *7uhch*, it is possible that such a system would not have developed.

Sketching these changes for *7uhch* is relevant for understanding the system of speaker-dependent temporal reference in Lakandon Maya even though such reference involves several other forms. The situation as it stands in Lakandon actually requires some of the observed changes in order not to present a contradiction, even if only an ad-hoc, “commonsensical” one. I will present the available forms and meanings as they can be found in Yukatek and Itzaj and then compare them to the results that are discussed in the present chapter.

In section 6.2.2, the forms, *ka7ch/kuhch* are also discussed, but in terms of semantic shifts without accompanying grammatical changes.

### 6.2.1 *7uhch* in Yukatek and Itzaj Maya

In Yukatek Maya, *7uhch* is a semantically “empty” verb that usually is translated as ‘(to) happen’. In an example from Hanks (1990), one of his consultants, DC tells Hanks how he got his “degree” for being a shaman-curer. It did not happen in the usual way, and DC concludes his story by uttering the phrase in (6.2):

YUK

- (6.2) *pero le-kaaso je7el-a7, b'ey uhch-ik ten-o7*  
 but DET-thing(Sp.) OST-TD.PROX MAN happen-ADV.FOC 1SG.IND-TD.DIST  
 ‘But this case (in my case), that’s how it happened to me’  
 (Hanks 1990: 284, [my orthographic adjustments and glossing])

The suffix that *7uhch* carries in (6.2), *-ik*, gives the impression that *7uhch* is a transitive verb (plain status *-ik*), when it in fact is not. The *-ik* suffix is the adverbial focus suffix<sup>35</sup> that is a remnant from a complete paradigm that was in place in Colonial Yukatek (cf. Yasugi 2005; section 5.3.3.2). The function of *7uhch* in (6.2) is as a one-place predicate.

Aside from this basic use of *7uhch* there is also the AM-marker, *7uhch* (‘long ago’) that is found equally in Lakandon with regard to syntactic placement and meaning:

<sup>35</sup> Kaufman (1991) calls this suffix “trace”.



YUK

- (6.3) *jaaj inw-oj=el, jach tuhn uhch inw-ir-Ø-ech don josej*  
 true 1SG.A-know very then long.ago 1SG.A-see-DEP-2SG.B PN  
 ‘Yes I know, Really though, it’s been a long time since I saw you, Don José’  
 (Lehmann 2000: 44, [my orthographic adjustments])

Most Yukatekanists agree that the AM-marker *7uhch* constitutes a grammaticalised use of the stative verb *7uhch* (cf. Bohnemeyer 1998; Kaufman 1991; Lehmann 2000). In all Yukatekan languages, the AM-marker *7uhch* also takes the dependent status, which in (6.3) is zero (cf. Bohnemeyer 1998, for Yukatek; Hofling 2000, for Itzaj; Kaufman 1991: 151, for Mopan).

A third use following from the adverbial-like function of the AM-marker *7uhch*, is in the form of a free-standing adverb. This function is also attested for all four Yukatekan languages and appears to be a continuation of the grammaticalisation that follows from the use of both proper verbs and adverbials (particles) in a preverbal AM-function. It is, however, done with different results.

As stated in chapter 5, Bohnemeyer (1998: 311) reports an interchangeable use of *ka7ch* and *7uhch* without any detectable difference in meaning. In (6.4) they co-occur:

- (6.4) *in-taataj-e7 k-uy-a7l-ik-Ø teen 7uhch, ka7ch*  
 1SG.A-father-TD.TOP INC-3SG.A-say-PLN-3SG.B 1SG.IND before before  
  
*chan xib'=paal-e7 le eskweela mahs 7uts [...]*  
 little male=child-TD.TOP DET school more good  
 ‘My father, he tells me that formerly (when) he was a kid, the schools [...] were better [...]’  
 (Bohnemeyer 1998: 311, [my orthographical adjustments and glossing])

No comparable semantic interpretation to the one I promote for Lakandon has been reported for Yukatek. Nor does there seem to be a similar distributional pattern in the use of *7uhch(-ij)* in Yukatek when compared to Lakandon from looking at the texts that Vapnarsky (2000) has collected.

In the seven texts that Vapnarsky includes in the appendix of her dissertation, *7uhch* occurs with comparably low frequency. It is present in the form of a freestanding adverb, but only occasionally, even in texts that may be classified as personal narratives, where *7uhch* would accompany every other phrase if a corresponding story were told in Lakandon Maya.

For example, in the first text, a personal narrative by one of Vapnarsky's consultants, *7uhch* is only present 4 times in the form of a freestanding adverb, in a text spanning 139 lines. This can be compared to the story told by CChNK about giving birth (Cuando nacio mi hija, UCLAK; see example 5.30) where *7uhch* occurs more than 60 times in a story 73 lines long! This constitutes a difference in frequency between using *7uhch* in 3 percent of the lines in Yukatek compared to 82 percent in Lakandon.

According to Vapnarsky, past events are related to the speech participants using *7uhch* by attaching a chosen terminal deictic (see sections 5.3.1.1, 5.3.3.3, 6.1.1). In essence, the meaning and function that *-a7*, *-o7*, *-e7* and *-i7* have in non-temporal acts of reference, as reported by Hanks, is also appropriate in the analysis of time words such as *7uhch* in Yukatek, according to Vapnarsky (p.c.; *ibid*: 200 pp). According to Vapnarsky, using *-o7* together with *7uhch* denotes a distance away from the interlocutors as well as 'shared information' (Fr. *savoir partagé*; *ibid*: 202) resulting in a kind of anaphoric reference to a temporally situated event.

As I have shown in my analysis in chapter 5 and as discussed in section 6.2.1, this is not a representative picture of what is going on in Lakandon Maya. Whether some event is regarded as new or old from a discourse perspective does not determine the encoded knowledge asymmetries in Lakandon. Nor is there a difference with regard to knowledge asymmetry between attaching *-a7* or *-o7* to a form like *7uhch* (see sections 5.3.1.1, 6.1.1, exx 2.4, 4.53).

Lastly, a derived form of *7uhch* that is unattested for Lakandon is the *potential*, or *hypothetical-future* AM-marker, *7uhch-uk/7uhch-ak* ('possible'). This form is attested for Colonial Yukatek and cognates of it are found in both Yukatek and Itzaj (cf. Bricker et al. 1998; Hofling 2000):

(6.5) *7uchuk in-b'eel-t-ik-Ø lo*  
 POT 1SG.A-do-TR-PLN-3SG.B ND  
 'I can do that'

(San Buenaventura 1684: 18; in Lehmann 2000: 102, [my orthographical adjustments and glossing])

It seems to me that the shift in meaning that I discuss in the present investigation with regard to *7uhch* and its contrast to *ka7ch(ik)/kuhch*, excludes the presence of *7uhchuk/7uhchak* in Lakandon Maya. Intuitively, it appears contradictory to derive two

diametrically opposed functions from *7uhch*, namely an *assurative/speaker-committed* meaning as opposed to a *hypothetical/potential* one.

The most important grammatical difference between *7uhch* in Lakandon and cognates of the form in the other Yukatekan languages is that *7uhch* has stopped functioning as a verb in Lakandon. This has allowed a shift in function where *7uhch* in the form of a free-standing adverb has become the most important and defining function, making possible the semantic changes discussed in the present work.

Given that *7uhch* originally was a stative verb, one may postulate a path of grammatical change that led from verb to AM-marker to freestanding adverb. This change probably took place in CY, or it may alternatively have occurred later in the separate Yukatekan languages.

Once *7uhch* began occupying a syntactic slot that is identical to the one where *ka7ch* and *kuhch* are found, it also became possible to contrast its meaning and use to those forms. Exactly how the shift from *temporal distance* to *speaker-addressee knowledge (a)symmetry* was made is not clear, but at the same time it is not a surprising shift given the semantics present in the rest of the system of deixis. If socio-centricity is an available semantic feature in acts of reference, then it does not require a conceptual leap to apply that feature to acts of temporal reference. The parallel development of *7uhch*, grammatically and semantically, may be schematised in the following way:

**Grammaticalisation path:**

*empty stative verb* → (stative) *AM-marker* → *free-standing adverb*

**Semantic path of change:**

*event description* → *temporal meaning* → *knowledge (a)symmetry*

The analysis and interpretation of the meaning of *7uhch* in Yukatek, means that these changes were not completely parallel with overlap between the semantic changes and the grammatical ones. Even though the AM-marker began to be used as an independent adverb, its temporal meaning apparently remained in Yukatek and changed in Lakandon. Other changes in form and meaning occurred in Yukatek as suggested above.

### 6.2.2 Semantic shift in *kuhch* and *ka7ch*

The path of semantic change from time to knowledge asymmetries that has taken place in Lakandon must be completed by what meaning and use *ka7ch/kuhch* have in Yukatek, and the meaning that is attested for the same forms in Colonial Yukatek (CY).

McQuown (1967) lists cognate forms from CY for both *ka7ch* and *kuhch*, namely *kachi* and *kuchi*. He provides glosses that denote *proximate temporal distance*: *kachi* refers to a time 'earlier today' and *kuchi* to 'before today' (ibid: 243). As we have seen for Lakandon, these two expressions have been retained in the separate dialects NL and SL. Supported by the analysis in chapter 5, the shift in meaning from 'earlier today' and 'before today' has come to denote a knowledge symmetry between the speaker and the addressee suggesting that temporal proximity when contrasted to an expression like *7uhch* (which in the form of an AM-marker prototypically refers to a time days or even weeks removed from the moment of utterance), has come to indicate a symmetry of knowledge. The path of semantic change then becomes:

(i) KUHCH/KA7CH: *temporal proximity* → *knowledge symmetry*

(ii) 7UHCH: *temporal distance* → *knowledge asymmetry*

In section 5.3.3, I stated that the cognates *ka7ch* and *kuhch* were attested for SL although the former, *ka7ch*, was only found in direct elicitation, and therefore cannot be compared to the use and distribution of the latter, *kuhch* in spontaneous speech. Despite this fact, the (meta-)discussion of their meaning revealed a similar temporal distinction to the one reported by McQuown above, where *ka7ch* referred to temporally proximate events and *kuhch* to more distant ones. I refer the reader back to the discussion in section 5.3.3, and only offer this reminder to connect the forms found in SL to the ones reported by McQuown for CY. What about the use of *ka7ch* in modern Yukatek?

Bohnemeyer calls *ka7ch(-il)* a "topic time shifter" (Bohnemeyer 1998: 305). He states that *ka7ch* fails to "locate the target event on the time line" and that it "merely indicate[s] a shift of topic time (cf. Klein 1994; TT) to an interval [...] anterior to coding time" (Bohnemeyer 1998: 305). Evidence for these statements comes from the fact that *ka7ch* fails to qualify as an answer to when-questions, as well as being

cancellable. These facts point to a non-tense-like meaning and function comparable to what I have observed for Lakandon.

Almost as a footnote, Bohnemeyer presents an example where *7uhch* and *ka7ch* occur in the same sentence (see section 6.2.1, above). He comments on the use of *7uhch* by referring to what his consultants have told him, namely that the two expressions are “freely substituted for each other” (ibid: 311). Since their contrastive semantics are peripheral to his own investigation, Bohnemeyer pays no attention to this fact.

William Hanks has the following to say regarding the meaning and use of *ka7ch(ij)*:

“One of the temporal particles is *ka7chij* ‘in the past’, which indicates that the state of affairs or event referred to in the clause took place prior to the moment of utterance (or some other ground established in discourse). The form encodes no indication of how long ago the event took place but only that, at the time of utterance it is over. In some contexts, the boundary between these two times, ‘now’ and ‘then’, is calculated relative to changes in location.” (Hanks 1990: 395).

Hanks includes several instances of *ka7ch(ij)* in examples otherwise geared towards illustrating the use of ostensive and locative deictic expressions that are the topic of his investigation. Although part of the context is visible in the discussion surrounding the examples, the (previous) knowledge of the speech participants is not.

YUK

(6.6) *tu7ux t-a-tz'a-(a)h-Ø le je7 ka7ch-a7*  
 where COM-2SG.A-hang-CP-3SG.B ND OST before-TD.PROX  
 ‘Where did you put this here before’

(ibid: 282, Context: The speaker refers to a previous spot where a hammock had been hanging the day before. [my orthographical adjustments and glossing])

Example (6.6) is a clear instance of how the use of *ka7ch* can be compared to the analysis promoted for Lakandon regarding the meaning of the reflex *ka7ch(ik)*. The speaker asks the addressee for his/her knowledge of a location that he assumes the addressee remembers.

Example (6.8), below, actually parallels an example from Lakandon where *kuhch* is used to scold a person (cf. 5.3.2.2). The example is repeated here for means of comparison:

(5.44) *t-inw-a7r-aj-Ø*                      *teech kuhch-e7*                      *ja7wän*  
 COM-1SG.A-say-CP-3SG.B    2SG.IND before.INCL-TD-ANA    BrW

*ma7 a-tak-ik-Ø*                      *in-jo7*                      *ti7 in-maam*  
 NEG1 2SG.A-hit-PLN-3SG.B    1SG.A-head    PREP 1SG.A-H

‘I told you previously, sister-in-law, not to tell on me to my husband!’

[HB050728\_AChKYK\_1]

YUK

(6.8) *ka t-aw-il-Ø*                      *e k’oh.a7an.il-o7 deser ahn taas*  
 when COM-2SG.A-see(-CP)-3SG.B    ND    sickness-TD-DIST    shall ??

*way ka7ach-e7*  
 here before-TD.ANA

‘When you saw that sickness, you should have brought him here right away.’

(ibid: 412, Context: DC (quoting himself) tells Hanks about a patient who had just left after having her infant treated, lightly scolding the woman in delivering the utterance. [my orthographical adjustments and glossing])

Both examples refer to something the addressee should have known, but acted in conflict with. It thus appears that one meaning parameter in (6.8) is between a factual state and a course of action that the addressee should have taken.

A final example illustrates the difficulties in analysing *ka7ch* from examples alone, since not enough background information is included with regard to what previous knowledge the addressee (in this case Hanks) had access to before the example was uttered.

(6.9) *ti7-an-o7on*                      *to*                      *ka7ach-o7*  
 SP.ANA-EXIST-1PL.B    SP.R.DIST    before-TD.DIST

‘We used to be (live) over there.’

(ibid: 420; 453, Context: WH and Pilar are talking in the courtyard of area 1 about the orchard in area 3. Pilar remarked that she and VC used to live over there. [my orthographical adjustments and glossing])

There are some indications that a (short) temporal distance may be insufficient for defining the semantics of *ka7ch* in Yukatek. Hanks hints at this in the quote above. If one compares (6.6) to (6.9), the difference in temporal perspective appears great enough that one would almost expect *7uhch* to be used in (6.9). It is however unclear if *7uhch* is commonly used in the form of a freestanding adverb in the variety of Yukatek that Hanks investigates. Another thing that is lacking for a proper analysis of the forms in

Yukatek is corresponding negative evidence, which has been collected for Lakandon. However, the contexts where *ka7ch* is found make a comparison possible regarding the pragmatic circumstances for the use of *ka7ch* in both Yukatek and Lakandon Maya.

This look at the cognate *ka7ch* in modern Yukatek leaves us without any possibility of knowing whether there are traces of the same features of meaning that I discuss for Lakandon in Yukatek equally. From a paradigmatic viewpoint, there are substantial differences in the distribution and use of *7uhch* if one compares Yukatek to Lakandon, as is evident from the texts that Vapnarsky (2000) uses for her analysis of time expressions in Yukatek (see section 6.2.1). Although Vapnarsky's texts and the example provided by Bohnemeyer points to the factual existence and use of *7uhch* as a freestanding adverbial, there are no indications of similar patterns of distribution or encoded meaning compared to the data in Lakandon.

One may speculate that the absence of explicit tense marking paired with a lack of time keeping strategies (cf. section 5.6) has shifted the speaker's interest away from an unspecified distance in time, towards information access and knowledge symmetries. Having said this, no cognitive or culture vis-à-vis language claims are made in the present investigation for the simple reason that the methods employed do not support such claims.

### **6.3 A- and B-series time in time reference**

If the conceptual distinction between A- and B-series time is taken at face value, one would expect two distinct ways of making reference to temporally situated events. The idea of two distinct ways of making time reference is reflected in the two qualificational categories tense and aspect, but also involves relative time reference, which proceeds from a non-deictic point of reference. However, an A-series perspective cannot be sufficiently described simply by assigning it to the category of tense. The difference between A- and B-series time entails more than substituting the moment of utterance with some reference time that would shift the act of reference to the B-series point of view. As noted and commented on in chapter 3, 'now' is more than a time period that coincides with the speaker's time of uttering a phrase including the same word; it is a point in time that is entirely reserved for the speaker's point of view and which takes into account the speech situation and the overall context of the place and time that the speaker perceives himself to occupy.

Given that A-series time reflects time perception as it is *experienced by the individual* we need to include an account of the role of the speaker and the context that he finds himself in if the semantic features relating to the speaker perspective are to become visible. This can only be achieved by an investigation that takes its starting point in a context sensitive research perspective. The present investigation has therefore moved outside the domain of traditional linguistic categories to investigate time reference from how it is enacted in specific speech situations. This point of view has made visible A-series time and how it contrasts with the B-series in acts of temporal reference. These differences are sketched below.

### 6.3.1 Memory and expectation

*Memory* and *expectation* are the relevant concepts when it comes to explaining A-series time and they are both key to the semantics of time words that reflect speaker-perspective, which was investigated in chapter 5. Although the two concepts separate “past” time reference from “future” time reference, they are also combined in both forms of reference. The salient semantics of a particle like *7uhch* expresses the memory of the speaker and his expectations regarding the memory/knowledge of the addressee. At the same time, *je7...(ik)-e7* also addresses the addressee with regard to what he can expect from some future event that the speaker either is instrumental in staging or has knowledge of from previous experience.

Something I think cannot be emphasised enough is the difference between viewing past time reference as an objective, context free act that simply places an event/state on the time line previous to the moment of utterance, and viewing it as a subjective, context dependent practice that takes into account the specifics of the speech situation and the expectations that the speaker has on the (previous) knowledge of the addressee.

In Lakandon Maya, the latter view allows a choice in the forms used to make reference to a past event that mimics the choice between ostensive deictics and epistemic modality markers (*je7re7*) in Yukatek. This socio-centric way of making temporal reference is conceptualised in terms of temporal distance with lesser distance equalling symmetric, shared knowledge, and greater distance corresponding to the asymmetric knowledge of the speaker.



The two kinds of reference that I have discussed above, i.e. the speaker- and the event-perspectives, correspond directly to the A-series and B-series time that in essence describe *time perception* and *relative/calendrical time*, respectively.

The mere fact that an event can be referred to using two separate markers, *7uhch* and *kuhch* (alt. *ka7ch*), without any difference with regard to *temporal*, *aspectual*, or *modal* content, suggests that the *updating of the beliefs of the speaker* (i.e. A-series time), as they are reflected in making reference to an event, is indeed sensitive to the specific context where an act of reference takes place. Speaker-dependent time reference is grounded both in the memory of the speaker and the expectations relevant to the speech situation that he finds himself in at the moment of utterance.

This kind of reference is completely separate from one where an event is anchored with regard to another event – regardless if that event constitutes the expectation of the speaker – or an event in a chain of events (i.e. B-series time).

The *origo* can thus be defined as the contextually defined participant configuration that the speaker occupies in making an act of reference. It includes the position of the other speech participants with regard to both the speaker and the object of reference. Temporal reference is by definition made differently by changing the position of the origo with regard to the object (figure) and vice versa. However, it is also possible to *maintain* the position of the origo with regard to the figure, but change the *internal configuration* of the origo, and still be forced to change the way reference is made.

A change to the internal configuration of the origo can also be said to change the object of reference itself despite an identical temporal position of that object. Compare figures 6.2 and 6.3:

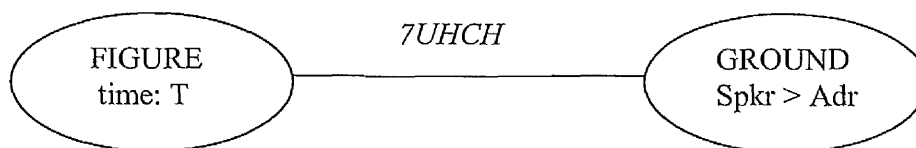


FIGURE 6.2 TIME REFERENCE, USING *7UHCH*

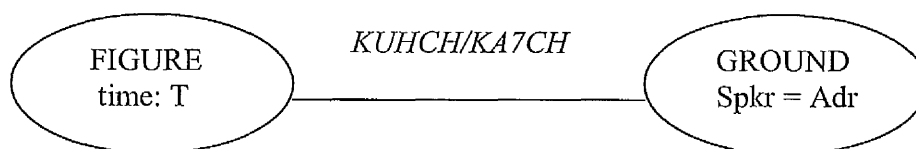


FIGURE 6.3 TIME REFERENCE, USING *KUHCH/KA7CH*

The hypothesised semantic changes that have taken place in Lakandon correspond to the distance between the figure and the ground becoming equated with a change in the ground itself. This shift is in agreement with how a change in temporal distance affects the configuration of knowledge between the speech participants that together make up the ground.

The semantic change that follows from this analysis, places memory and expectation (between speech participants) firmly together. Forms like *7uhch* and *kuhch/ka7ch* are used to make reference to events and states that the speaker can access from memory, but they also express the speaker's expectations regarding the addressee's access to the same event/state. A change in the expectations that the speaker has towards the knowledge of the addressee will result in a change in the way he makes reference to an event/state that in itself remains unchanged. This form of expectation is of the secondary kind that was discussed in section 3.3.3, and is conceptually more closely connected to modality than it is to temporality. The analysis presented here thus illustrates the problem of concept-category that has been extensively discussed with regard to tense and mood, but from another point of view.

## 6.4 Summary and Results

I think there is every reason to regard the shift in meaning that has occurred in the Lakandon time words *7uhch*, *ka7chik/kuhch*, *b'aje7*, and *tok*, to indicate knowledge asymmetries, as being an instance of *encoded meaning*. The pragmatic motivations that are behind the use of these words are just that: pragmatic motivations. The meaning is not conveyed, but encoded. Arguments for this view are the following: 1) *intra-speaker consistency*: the use of the expressions is consistent with speakers of both sexes and different age groups, 2) *diachronic stability*: processed recordings from almost 40 years ago show the same distribution and use that recently made recordings do, 3) *dialectal non-variation*: speakers of both dialects (i.e. NL and SL) use two separate forms in identical ways. This suggests that the expectation to be able to indicate the knowledge asymmetry between speaker and addressee is in place in both dialects despite differences in vocabulary.

Most importantly, there is also the issue of *systematic consistency*. If one considers the system for making deictic reference in Yukatekan languages in general and more specifically in Lakandon, one would almost *expect* to see the presently

observed set of oppositions in the forms used for deictic temporal reference. There can be little doubt that a socio-centric system for making ostensive, nominal, locative, and participant reference is in place in Yukatek (Hanks 1990). This system has been retained in Lakandon, formally and semantically (see section 4.4.2), and it is even possible that previous investigations of e.g. *ka7ch* in Yukatek have failed to take into account indications of the presence of (a)symmetry relations in the indexical ground in acts of temporal reference.

Lastly, there is a lack of alternative interpretations. A definition in terms of temporality alone is simply not tenable from the observed uses that the discussed forms have and the “grammaticality judgements” that speakers offer regarding their use and meaning (see section 5.3.3). This is especially so when one looks at the two forms, *7uhch* and *kuhch/ka7ch* as belonging to a closed paradigm for making speaker-dependent time reference.

If the best way to understand the meaning of the investigated time words is to regard what has happened in Lakandon as an independent semantic shift compared to the situation in Yukatek, then how did this shift happen?

Östen Dahl proposes a process that is relevant to explaining the sometimes-blurred distinction between tense- and aspect marking. There are according to Dahl “mechanisms for creating secondary foci and secondary interpretations” (Dahl 1985: 11) that may constitute a common process of change in languages more generally. He calls this process *conventionalization of implicatures*. For lack of ability to formulate Dahl’s idea regarding this process better than he does himself, I include a quote where the concept is explained:

“Following what is by now standard terminology, I use the term **implicature** [...] to mean something that can be inferred from the use of a certain linguistic category or type of expression, although it cannot be regarded as belonging to its proper meaning. It should be noted that given a prototype approach to meaning, the borderline between implicatures and meaning proper is much less clear than it may be in other theories, since a prototype is a set of ‘characteristic’ rather than a set of ‘defining’ features. What happens when a conversational implicature is conventionalized may be described as follows: if some condition happens to be fulfilled frequently when a certain category is used, a stronger association may develop between the condition and the category in such a way that the condition comes to be understood as an integral part of the meaning of the category. For instance, the tendency for categories like the English Perfect to develop ‘inferential’ interpretations might be explained in this way [...]. Another example

would be the development of Perfects and Pluperfects into recent and remote pasts, respectively [...] (ibid: 11).

The term secondary meaning must, in light of Dahl's definition, be regarded as a development of the first, or original meaning, not necessarily a subordinate meaning that exists in a hierarchical relation with the "primary" one.

The idea of conventionalised implicature as a process to generate new meaning in expressions matches the conditions for the development that has taken place in Lakandon with regard to the proposed semantic shift from *time* to *knowledge access* with the following (plausible) scenario: *7uhch* is frequently used to refer to events that lie over some temporal horizon where the speaker only makes assumptions regarding his own memory of the event, whereas *kuhch* (or *ka7ch*) is used in reference to recent, or possibly familiar, events that are assumed to be remembered by anyone that was present.

The resulting semantics contradict the commonly accepted definition of time reference. There is quality to time periods (i.e. temporalised events) and that quality also means a richer definition of the origo, which necessarily is imbued with that same quality in terms of the configuration of speech participants and who knows what about the object of reference.

#### 6.4.1 Implications for further research

The results of the present investigation have relevance for the investigation of deixis as well as temporality. The tendency of proportionality and the systematic consistency across the category of deixis in a language like Lakandon supports previous investigations from the related language Yukatek. Although not unexpected, such observations have consequences for the category-concept distinction that is well-known to be a problematic topic in linguistics.

The results presented here suggests that the *concept* of temporality contains more variation than the *category* of tense would allow, as defined in the literature. Given that deixis is a category available for reference in several dimensions (i.e. space, time, etc.), the presence of semantic features in time deictics that lie "outside" of the temporality concept therefore poses a problem. Is the nature of tense different from temporal reference by means of deictic forms? Or are the semantic features stemming from the time-line concept not enough for a complete account of time in language? It is possible

that the research tradition on tense has overlooked important parameters of meaning, but given the focus of research in the present investigation, no solution to this problem is offered.

Another possibility that has been considered in this investigation is that the extra-temporal semantics present in forms for making temporal reference in Lakandon belong to a separate category, tentatively called *participant perspective*. The core dimension of meaning in such a category would concern the configuration of speech participants and their individual beliefs as they are reflected in the mind of the speaker. However, the existence of a new category can not be claimed without a lot of research to support its existence, which is why terms such as *knowledge asymmetries* and the *configuration of the indexical ground* have been used instead of a name for a categorical label that is far from being accepted.

It appears reasonable, to me, from the view of processes of grammaticalisation that semantics of the investigated kind, which (perhaps by conventionalised implicature) are lexicalised in free-standing forms, can become grammaticalised into affixes or clitics with a function not unlike that of tense forms but with preserved semantic features found in the lexemes of the earlier stage. If so, I would predict the presence of semantics relating to asymmetries of the indexical ground in what has been described as tense-mood forms in languages that have this conceptual feature in other areas of its grammar. If one considers the importance of context (i.e. pragmatic concerns) in most areas of grammar in language, such forms should not be uncommon.

The separation between pragmatics and semantics in the present context appears unproblematic. Pragmatic motivations and the configuration of the speech participants have resulted in encoded semantics. This means that a lot of time and effort has been put into understanding the specifics of the speech situation while subsequent analysis has confirmed the presence of encoded semantics in the investigated forms that have arisen from contextual imperatives. No effort has been made to align the results with any specific semantic theory although the choice to adopt the research perspective from Hanks' investigation of deixis in Yukatek means that frame semantics and a semantics of understanding (Fillmore 1985) underlies the strategies for investigating the semantics of the forms from the greater context wherein they are used.

### 6.4.2 Conclusion

The questions that we set out to answer at the beginning of this chapter and in the introduction in chapter 1 have been given answers. The semantics that are relevant to the description of time reference in Lakandon Maya are not in conflict with the results of previous investigations of time reference by other researchers (e.g. Comrie 1985; Klein 1994; Bohnemeyer 1998). The differences between these investigations and the present one can only be viewed in terms of corresponding differences in research perspective, where the present investigation has placed pragmatic (i.e. context salient) concerns at the front. I have chosen to make visible the speech participants and the context of the speech situation in order to arrive at a nuanced interpretation of a number of time words that lacked representative descriptions in previous investigations of Lakandon and the related languages Yukatek and Itzaj Maya.

I have attempted to map the form, function, and meaning of *7uhch* and *ka7ch/ku(h)ch* in Yukatek and Colonial Yukatek onto cognates of the same forms in Lakandon (section 6.2; 6.4). Although similar in some respects, there are several differences that mainly concern the distribution/use and semantics of the forms. These differences point to a separate development in Lakandon, perhaps by a conventionalisation of implicatures as Dahl suggests (see section 6.4, directly above).

An important, but unsurprising claim in the present investigation is that *speaker-dependent* time reference can be predicted from looking at the rest of the system of deixis in Yukatek and Lakandon Maya (section 4.4). It is in agreement with the analysis presented by Hanks with regard to spatial, nominal, locative, and person deixis in Yukatek and although the forms that represent the available indexical ground symmetries are less uniform than the corresponding forms for e.g. ostension in Yukatek, they share an identical function and semantic content in this respect.

Finally, the semantically and pragmatically motivated separation of time reference into speaker- and event-perspectives illustrates nicely the conceptual distinction between the philosophical concept of A- and B-series time, where the former concept operates by wholly distinct mechanisms compared to the latter, not only with regard to the point of reference but by the very quality of the origo (i.e. the indexical ground), the description of which has occupied much of the present investigation.

## References

- Aikhenvald, Y. Alexandra (2004) *Evidentiality*. Oxford: Oxford University Press.
- Aissen, Judith L. (1992) Topic and focus in Mayan. *Language* 68: 43-80.
- Aissen, Judith L. (1999) Agent Focus and Inverse in Tzotzil. *Language* 75: 451-485.
- Alverson, Hoyt (1994) *Semantics and Experience, Universal Metaphores of Time in English, Mandarin, Hindi, and Sesotho*. London: John Hopkins University Press.
- Anderson, Stephen R. & Keenan, Edward L. (1985) Deixis. In Timothy Shopen (ed.), *Language typology and syntactic description: Grammatical categories and the lexicon*, vol 3. 259-308, Cambridge: Cambridge University Press.
- Aveni, Anthony (1989) *Empires of Time – Calendars, Clocks & Cultures*. New York: Kodansha.
- Austin, J. L. (1962) *How to do things with words*. Oxford: Clarendon Press.
- Austin, Peter K. (1998) Temporal reference, Tense and Aspect in Australian Aboriginal Languages. In Yasuhiko Nagano (ed.), *Time, Cognition and Language*, Senri Ethnological Studies no. 45: 143-169. Osaka: National Museum of Ethnology.
- Austin, Peter K. (2003) (ed.) *Language Documentation and Description Volume 1*, London: SOAS.
- Austin, Peter K. (2004) (ed.) *Language Documentation and Description Volume 2*, London: SOAS.
- Austin, Peter K. (2005) (ed.) *Language Documentation and Description Volume 3*, London: SOAS.
- Baer, Phillip & William Merrifield (1971) *Two studies of the Lacandonese of Mexico*. (SIL) Oklahoma: University of Oklahoma.
- Barnes, J. (1974) *Kédang*. Oxford: Clarendon.
- Bartee, Ellen Lynn (1996) *Deixis and Spatiotemporal Relations in Lhasa Tibetan*. MA thesis in Linguistics, The University of Texas at Arlington.
- Benveniste (1958) De la subjectivité dans le langage. In *Problèmes de linguistique générale*, Vol. 1: 258-66. Paris: Gallimard.
- Bergqvist, Henrik (2006) Semantics of temporal deictics in Lakandon Maya. In *Proceedings of the Conference on Indigenous Languages of Latin America II*, University of Texas at Austin 27<sup>th</sup>-29<sup>th</sup> October 2005. ([http://www.ailla.utexas.org/site/cilla2\\_toc.html](http://www.ailla.utexas.org/site/cilla2_toc.html))
- Bergqvist, Henrik (forthcoming) Agent Focus in Yukatek and Lakandon Maya. *Paper presentation at the 33<sup>rd</sup> annual meeting of the BLS*. Berkeley 9<sup>th</sup>-11<sup>th</sup> February 2007.
- Blair, Robert Wallace (1964) *Yucatec Maya Noun and Verb Morphosyntax*. PhD Dissertation in Linguistics, Indiana University.
- Bloch, M. (1977) The past in the present and the past, *Man* (n.s.) 12: 278-292.
- Bohnemeyer, Jürgen (1997) Yucatec Mayan lexicalization patterns in time and space. In M. Biemans & J. v.d. Weijer (eds.), *Proceedings of the CLS Opening Academic Year 1997-1998*. Tilburg: Center for Language Studies. 73-106.
- Bohnemeyer, Jürgen (1998) *Time Relations in Discourse: Evidence from a Comparative Approach to Yucatec Maya*. PhD Dissertation, Katholieke Universiteit.
- Bordieu, Pierre (1963) The Attitude of the Algerian Peasant Towards Time. In j. Pitt-Rivers (ed.), *Mediterranean Countrymen*. Paris Recherches Méditerranéennes.
- Bordieu, Pierre (1977) *Towards a Theory of Practice*. Cambridge: Cambridge University Press.

- Boremanse, Didier (1974) *An Ethnographic Survey of the Modern Lacandon with a Special Reference to Their Neighbours in the Usumacinta and Pasion Drainage during the 16th Century*. Oxford: University of Oxford.
- Boremanse, Didier (1978) *The Social Organization of the Lacandon Indians of Mexico: A Comparative Study of Two Maya Forest Peoples*. Oxford: Campion Hall.
- Boremanse, Didier (1979) Magic and Poetry among the Maya: Northern Lacandon Therapeutic Incantation. *Journal of American Lore* 5 (1): 45-53.
- Boremanse, Didier (1981a) A Comparative Study of Two Maya Kinship Systems. *Sociologus* 31 (1): 1-37.
- Boremanse, Didier (1981b) A Southern Lacandon Account of the Moon Eclipse. *Latin American Indian Literatures* 5 (1): 1-6.
- Bricker, Victoria R. (1979) Wh-questions, relativization, and clefting in Yucatec Maya. In L. Martin (ed.), *Papers in Mayan Linguistics*. Columbia, Missouri: Lucas Brothers. 107-136.
- Bricker, Victoria R. (1981a) The source of the ergative split in Yucatec Maya. *Journal of Mayan Linguistics* 2/2: 83-127.
- Bricker, Victoria R. (1981b) Grammatical Introduction. In E. Po'ot Yah, *Yucatec Maya Verbs (Hocaba dialect)*. With a grammatical introduction by Victoria R. Bricker. Translated by James Ward. vi-xlvi, Tulane: Centre for Latin American Studies, Tulane University (Latin American Studies Curriculum Aids).
- Bricker, Victoria R., Eleuterio Po'ot Yah and Ofelia Dzul de Po'ot (1998) *Dictionary of the Maya Language as Spoken in Hocabá, Yucatán*. Salt Lake City: University of Utah Press.
- Bruce S., Roberto D. (1968) *Gramática del Lacandón*. Mexico City: Instituto Nacional de Antropología e Historia.
- Bruce S., Roberto D. (1974) *Libro de Chan K'in*. Mexico: Instituto Nacional de Antropología e Historia. Secretaría de Educación Pública (Colección Científica Lingüística).
- Bruce S., Roberto D. (1975, 1979) *Lacandon Dream Symbolism: Dream Symbolism and Interpretation Among the Lacandon Mayas of Chiapas*. Mexico: Editiones Euroamericanas Klaus Thiele.
- Bruce S., Roberto D. (1976) *Textos y Dibujos Lacandones de Naha, Edición trilingüe: Lacandon-Espanol-English*. Mexico: Instituto Nacional de Antropología e Historia. Secretaría de Educación Pública (Colección Científica Lingüística).
- Bruce S., Roberto D., & Carlos Robles U. & Enriqueta Ramos Chao (1971) *Los Lacandones: Cosmovision Maya*. Mexico: Instituto Nacional de Antropología e Historia.
- Campbell, Lyle (1997) *American Indian Languages: the Historical Linguistics of Native America*. Oxford: Oxford University Press (Oxford Studies in Anthropological Linguistics).
- Campbell, Lyle & T. Kaufman (1985) Mayan Linguistics: Where are we now? *Annual Review of Anthropology* 14: 187-98.
- Canger, Una (1970a) Lacandón Root Dictionary. MS
- Canger, Una (1970b) Notes on Lacandón. MS
- Canger, Una (1970c) Lacandón Texts. MS
- Chafe, Wallace (1994) *Discourse, Consciousness, and Time: the Flow and Displacement of Conscious Experience in Speaking and Writing*. Chicago: The University of Chicago Press.
- Chomsky, Noam (1968) *Language and Mind*. New York: Harcourt, Brace and World.
- Comrie, Bernard (1976) *Aspect*. Cambridge: Cambridge University Press.



- Comrie, Bernard (1985) *Tense*. Cambridge: Cambridge University Press.
- Dahl, Östen (1984) Temporal distance: remoteness distinctions in tense-aspect systems. In B. Butterworth, B. Comrie & Ö. Dahl (Eds.) *Explanations for language universals*. 105-122, Berlin: Mouton.
- Dahl, Östen (1985) *Tense and Aspect Systems*. Oxford: Blackwell.
- Dahl, Östen (2006) Hunter languages and farmer languages – are they different? Conference handout: *Spridda språk, October 13 2006*. Stockholm university.
- Danziger, Eve (1994) Out of Sight, Out of Mind: Person, Perception and Function in Mopan Maya Spatial Deixis. *Linguistics* 32: 885-907.
- Danziger, Eve (1996) Split transitivity and Active-Inactive Patterning in Mopan Maya. *International Journal of American Linguistics*. 62:379-414.
- Danziger, Eve (2001) *Relatively Speaking: Language, Thought, and Kinship among the Mopan Maya*. Oxford studies in anthropological linguistics, 26. Oxford: Oxford University Press.
- DeLancey, Scott (1997) Mirativity: The grammatical marking of unexpected information. *Linguistic Typology* 1.1: 33-52.
- de Vos, Jan (1980) *La paz de Dios y del Rey. La conquista de la Selva Lacandona*. Colección Ceiba, Gobierno del Estado de Chiapas, México.
- de Vos, Jan (1988) *Oro verde. La conquista de la Selva Lacandona por los maderos Tabasqueños, 1822-1949*. Mexico City: Fondo de Cultura Económica/ Instituto de Cultura de Tabasco.
- de Vos, Jan (1995) "El Lacandón: Una introducción histórica" in Juan Pedro Viqueira and Mario Humberto Ruz (eds.) 1995 *Chiapas: Los Rumbos de Otra Historia*. Mexico City: UNAM.
- de Vos, Jan (2002) *Una Tierra para Sembrar Sueños: Una Historia Reciente de la Selva Lacandona, 1950-2000*. Mexico City: Fondo de Cultura Económica – Centro de Investigaciones y Estudios Superiores en Antropología Social.
- Diessel, Holger (1999) *Demonstratives: Form, Function, and Grammaticalization*. Amsterdam: John Benjamin Publishing Company.
- Dixon, R.M.W. & Alexandra Y. Aikhenvald (eds.) (1999) *The Amazonian Languages*. Cambridge: Cambridge University Press.
- Duranti, A. (1997) *Linguistic Anthropology*. Cambridge: Cambridge University Press.
- Duranti, A. (2004) (ed.) *A Companion to Linguistic Anthropology*. Malden, Mass.: Blackwell.
- Durkheim, Emile (1915) *The Elementary Forms of the Religious Life*, London: Allen & Unwin.
- Enç, Mürvet (1996) Tense and Modality. In Shalom Lappin (ed.), *The Handbook of Contemporary Semantic Theory*. 345-358, Blackwell Publishers.
- Evans, Nicholas (2007) View with a view: towards a typology of multiple perspective. *Berkeley Linguistics Society*, 93-120.
- Evans-Pritchard, E. (1939) Nuer time reckoning, *Africa* 12: 189-216.
- Farriss, Nancy M. (1987) Remembering the Future, Anticipating the Past: History, Time and Cosmology among the Maya of Yucatan. *Comparative Studies in Society and History* 29(3): 566-93.
- Fillmore, Charles (1982) Towards a Descriptive Framework for Spatial Deixis. In R. Jarvella and W. Klein (eds.) *Speech, Place, and Action: Studies in Deixis and Related Topics*. 31-59, New York: John Wiley and Sons.
- Fillmore, Charles (1985) Frames and the Semantics of Understanding. *Quaderni di Semantica*. 6(2) 222-253.
- Fillmore, Charles (1997) *Lectures on Deixis*. Stanford: CSLI Publications.

- Fraser, Bruce (1999) What are discourse markers?. *Pragmatics* 31: 931-952.
- Geertz, Clifford (1973) *The Interpretation of Culture*. New York: Basic Books.
- Gell, Alfred (1992) *The Anthropology of Time: cultural constructions of temporal maps and images*. Explorations in Anthropology. Oxford: Berg.
- Gell, Alfred (1998) Time and Social Anthropology, In Yasuhiko Nagano (ed.), *Time, Cognition and Language*, Senri Ethnological Studies no. 45: 143-169. Osaka: National Museum of Ethnology.
- Goddard C. & Wierzbicka A. (1994) Introducing lexical primitives. In C. Goddard & A. Wierzbicka (eds.) *Semantic and lexical universals: theory and empirical findings*. Studies in language companion series, vol 2: 31-54, Amsterdam: Benjamins.
- Goffman (1981) *Forms of talk*. Philadelphia: University of Pennsylvania Press.
- Grice, H.P. (1957) Meaning. *Philosophical Review* 66: 377-88
- Hanks, William F. (1983) Functional Structure of Yucatec Maya [course materials: 61pp]
- Hanks, William F. (1984) The Evidential Core of Deixis in Yucatec Maya. In J. Drogo, V. Mishra, & D. Testen (eds.), *Papers from the twentieth Annual Regional Meeting of the Chicago Linguistics Society* 20: 154-172, Chicago University.
- Hanks, William F. (1990) *Referential practice: language and lived space among the Maya*. Chicago: University of Chicago Press.
- Hassig, Ross (2001) *Time, History, and belief in Aztec and Colonial Mexico*. Austin: University of Texas Press.
- Haspelmath, Martin (1997) *From Space to Time – Temporal Adverbials in the World's Languages*. München: LINCOM EUROPA.
- Helmuth, Nicholas M. (1970) *A Bibliography of the 16th-20th Century Maya of the Southern Lowlands: Chol, Chol Lacandon, Yucatec Lacandon, Quejache, Itza and Mopan, 1524-1969*. Museum of Antropology, Greeley, Colorado: University of Northern Colorado.
- Himmelman, Nikolaus (1998a) Documentary and Descriptive Linguistics. *Linguistics* 36:161-195.
- Himmelman, Nikolaus, Jost Gippert & Ulrike Mosel (eds.) (2006) *Essentials of language documentation*, Trends in Linguistics, Studies and Monographs 178, Berlin: Mouton de Gruyter.
- Hofling, Charles A. (1991) *Itzaj Maya Texts (with a grammatical overview)*. Salt Lake City: University of Utah Press.
- Hofling, Charles A. (1997) *Itzaj Maya-Spanish-English Dictionary*. Salt Lake City: University of Utah Press.
- Hofling, Charles A. (2000) *Itzaj Maya grammar (with Félix Fernando Tesucín)*. Salt Lake City: University of Utah Press.
- Kaufman, Terrence [with Juan Mendoza] (1971) Field-notes on Mopán. 46+50+98 pp. ms.
- Kaufman, Terrence (1990) Algunos Rasgos Estructurales de los Idiomas Mayances con Referencia Especial al K'iche' in England, Nora C., Elliot Stephen R. (eds.). *Lecturas sobre la Linguística Maya* 59-116. Vermont: Plumsock Mesoamerican Studies.
- Kaufman, Terrence (1991) Notes on the Structure of Yukateko and other Yukatekan languages (Nov-Dec 1991), PDLMA Seminar handout.
- Kaufman, Terrence (2002) Mayan Comparative Studies. vol 1. PDLMA material, unpublished ms 500+ pp.
- Klein, Wolfgang (1994) *Time in Language*. London: Routledge.

- Kroeker, Menno (2001) A Descriptive Grammar of Nambikuara. *International Journal of American Linguistics*, vol. 67-1: 1-87. Chicago: University of Chicago.
- Lakoff, George (1987) *Women, fire, and dangerous things*. Chicago: Chicago University Press.
- Lakoff, George & Mark Turner (1980) *Metaphors we live by*. Chicago: Chicago University Press.
- Lakoff, George & Mark Turner (1999) *Philosophy in the flesh: the embodied mind and its challenge to western thought*. New York: Basic Books.
- Langacker, R. (1987) *Foundations of Cognitive Grammar*, Vol 1. Stanford: Stanford University Press.
- Leach, Edmund (1961) *Rethinking Anthropology*. London: Athlone.
- Lehmann, Christian (1993) Predicate Classes in Yucatec Maya. *Función* 13-14: 195-272.
- Lehmann, Christian (1998) *Possession in Yucatec Maya*. LINCOM Studies in Native American Linguistics, 4. München: LINCOM Europa.
- Lehmann, Christian (2000) *Person Prominence and relation prominence: on the typology of syntactic relations with special reference to Yucatec Maya*. LINCOM studies in theoretical linguistics, 17. München: LINCOM Europa.
- Levinson, Stephen C. (1983) *Pragmatics*. Cambridge: Cambridge University Press.
- Levy, Paulette (1999) From 'part' to 'shape': incorporation in Totonac and the issue of classification by verbs. *International Journal of American Linguistics*, vol 65-2: 127-75.
- Lowe, Ivan (1999) Nambikuara. In Dixon, R.M.W. & Alexandra Y. Aikhenvald (eds.), *The Amazonian Languages*. Cambridge: Cambridge University Press, 269-291.
- Lucy John A. (1992a) *Grammatical categories and cognition: a case study of the linguistic relativity hypothesis*. Studies in the social and cultural foundations of language, 13. Cambridge: Cambridge University Press.
- Lucy John A. (1992b) *Language diversity and thought*. Studies in the social and cultural foundations of language, 12. Cambridge: Cambridge University Press.
- Lucy, John A. (1994) The role of semantic value in lexical comparison: motion and position roots in Yucatec Maya. *Linguistics* 32: 623-656.
- Malotki, Ekkehart (1983) *Hopi time: A Linguistic Analysis of the Temporal Concepts in the Hopi Language*. Amsterdam: Mouton.
- McQuown, Norman A. (1967) Classical Yucatec (Maya). In Norman A. McQuown (ed.), *Handbook of Middle American Indians*, Supplement 5: 201-247.
- Munn, Nancy (1992) The Cultural Anthropology of Time: A Critical Essay. *Annual Review of Anthropology* 21: 93-123.
- Narrog, Heiko (2005) Modality, mood, and a change of modal meanings: A new perspective. In *Cognitive Linguistics*. vol 16-4: 677-731, Berlin: Mouton de Gruyter.
- Nuyts, Jan (2001) *Epistemic Modality, Language, and Conceptualization: A Cognitive-Pragmatic Perspective*. Amsterdam: John Benjamins Publishing Company.
- Palmer, F.R. (1986) *Mood and Modality*. Cambridge: Cambridge University Press.
- Pinker, Steven (1994) *The Language Instinct*. New York: Morrow.
- Quine, W. V. (1960) *Word and Object*. Cambridge: MIT Press.
- Reichenbach, H (1947) *Elements of symbolic Logic*. New York: Macmillan.
- Restall, Matthew & Lisa Sousa & Kevin Terraciano (2005) *Mesoamerican Voices: Native writings from Colonial Mexico, Oaxaca, Yucatan, and Guatemala*. Cambridge: Cambridge University Press.

- Svorou, Sotaria (1996) *The Grammar of Space*. Amsterdam: John Benjamins (Typological Studies in Language 25).
- Talmy, Leonard (1988) Force dynamics in language and cognition. *Cognitive Science* 2: 49-100.
- Tozzer, Alfred M. (1907) *A Comparative Study Of The Mayas And The Lacandones*. New York: Macmillan.
- Tozzer, Alfred M. (1921) *A Maya Grammar: with Bibliography and Appraisal of the Works Noted*. Cambridge, Mass: Peabody Museum.
- Traugott, Elisabeth (1989) On the Rise of Epsitemic Meanings in English: An Example of Subjectification in Semantic Change. *Language* 65-1: 31-55.
- Traugott, Elisabeth Closs & Richard B. Dasher (2002) *Regularity in Semantic Change*. Cambridge: Cambridge University Press.
- Trench, Tim (2002) *Conservation, Tourism and Heritage: Continuing Interventions in Lacanja Chansayab, Chiapas, Mexico*. PhD Dissertation in Social Anthropology: University of Manchester.
- Schiffrin, Deborah (1987) *Discourse Markers. Studies in Interactional Sociolinguistics*. Cambridge: Cambridge University Press.
- Smith, Michael E. (1996) *The Aztecs*. Oxford: Blackwell Publishing
- Swadesh, Morris (1967) Lexicostatistic Classification. In Norman McQuown (ed.), *Handbook of Middle American Indians*. Supplement 5: 79-115, Austin: University of Texas Press.
- Vapnarsky, Valentina (1999) *Expressions et Conceptions de la Temporalité Chex les Mayas Yucateques (Mexique)*. PhD Dissertation, Université de Paris-X Nanterre.
- Vapnarsky, Valentina & Ximena Lois (2003) *Polyvalence of root classes in Yucatekan Mayan languages*. LINCOM Studies in Native American Linguistics 47. München: LINCOM Europa.
- Whorf, Benjamin (1956) An American Indian Model of the Universe, In Carroll, John B. (ed.), *Language, Thought and Reality – Selected Writings of Benjamin Lee Whorf*. Cambridge, Massachusetts: MIT Press.
- Winter, Simon (1998) *Expectations and Linguistic Meaning*. Lundagård: Lund University Cognitive Studies 71.
- Wittgenstein, L. (1953) *Philosophical Investigations*. Oxford: Blackwell.
- Yasugi, Yoshiho (2005) Fronting of Nondirect Arguments and Adverbial Focus Marking on the Verb in Classical Yucatec. *International Journal of American Linguistics* 71-1: 56-86. Chicago: The University of Chicago.

